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Differences in language learning strategies between male and female, and also between Asian and Latino ESL students

Dai Osanai

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To the Graduate Council:

I am submitting herewith a dissertation written by Dai Osanai entitled "Differences in language learning strategies between male and female, and also between Asian and Latino ESL students." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Education.

Patricia Davis-Wiley, Major Professor

We have read this dissertation and recommend its acceptance:

Teresa Hutchens, Bethany Dumas,

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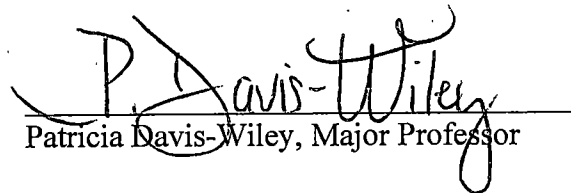
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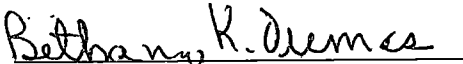
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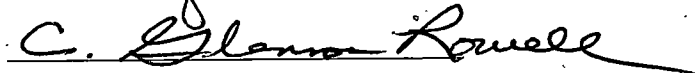
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Patricia Davis-Wiley, Major Professor


We have read this dissertation
and recommend its acceptance:







Accepted for the Council:


Associate Vice Chancellor and
Dean of The Graduate School

DIFFERENCES IN LANGUAGE LEARNING STRATEGIES
BETWEEN MALE AND FEMALE,
AND ALSO BETWEEN ASIAN AND LATINO ESL STUDENTS

A Dissertation
Presented for the
Doctor of Education
Degree
The University of Tennessee, Knoxville

DAI OSANAI
December 2000

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ABSTRACT

The purpose of this study was to investigate whether or not differences exist between female and male and also between Latino and Asian Students in the use of languages learning strategies by administering self-reported questionnaires to foreign students learning English in American universities.

The data for this research study were provided by 147 foreign students at five mid- to large-sized universities in the Southeastern United States. The primary questionnaire, consisting of 50 closed-ended questions for this research study, was entitled "Strategy Inventory for Language Learning (SILL)." A background questionnaire consisting of five open-ended and eight closed-ended questions, developed by the researcher of this study, was also administered together with the SILL.

The findings of this study were as follows: (1) there was no statistically significant gender difference in the use of language learning strategies as a whole. However, female students tend to use learning strategies more often than males. As for differences in the use of the six categories of language learning strategies, gender differences were significant in the use of social and affective strategies, with females reporting the use of more strategies; (2) there was no statistically significant difference between Latino and Asian students as a whole. Nonetheless, Latino students in general reported using strategies more frequently than their Asian counterparts. In the use of the six categories of language learning strategies, significant differences were found in the use of metacognitive and social strategies, with Latino students using them more frequently; (3) level of motivation and self-ratings of proficiency were found to be significantly

correlated to the use of language learning strategies. Other variables such as motivational type, years of studying English, length of staying in the United States, and the number of languages spoken were detected not to be significantly correlated to the use of language learning strategies; (4) a statistically significant difference was found in school majors in regard to language strategy use. Students who major in science/computer/health science reported to use more strategies than business/law students; and (5) level of motivation was found to be the single most influential factor on language learning strategy use. The influence of gender and self-ratings of proficiency was not revealed as statistically significant. However, this influence was substantial.

The major conclusions were as follows: (1) there appear to be no gender differences in the use of language learning strategies in general, although females tend to use strategies more often. As to categories of language learning strategies, there are differences between genders in the use of social and affective strategies, with females using them more often; (2) there appear to be no differences between Latino and Asian students in the use of language learning strategies in general, although Latino students use strategies more often than their Asian counterparts. In categories of strategy use, however, there are differences in the use of metacognitive and social strategies, with Latino students using strategies more frequently; (3) among variables affecting the use of language learning strategies, two variables, motivation and self-ratings of proficiency level seems to be positively correlated to the use of language learning strategies. This indicates that the more one is motivated or the higher one rates his/her English proficiency, the more one uses language strategies; (4) there appear to be differences

among learners with different school majors in regard to language learning use. Students majoring in science/computer/health science use more strategies than those majoring in business/law.

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CHAPTER I

INTRODUCTION

Introduction

Research claims that females are better than males in language acquisition (Larsen-Freeman & Long, 1991; Maccoby & Jacklin, 1974). Psychological literature suggests biological reasons for this female superiority (Gandelman, 1983; Hull, Meilke, Timmons, & Willeford, 1971; Hyde, 1981; Larsen-Freeman & Long, 1991; Mann, Sasanuma, Sakuma, & Masaki, 1990 Maccoby & Jacklin, 1974; McGlone, 1980; McGuinness, 1972; Smith & Connolly, 1972) and Sociolinguistic literature also implies a female communicative superiority over males (Fishman, 1978/1983; Hirshman, 1994; Jones, 1980; Maltz & Borker, 1982; Oxford, Nyikos, & Ehrman, 1988; Tannen, 1990/1994; Wardhaugh, 1986; West, 1984; Zimmerman & West, 1975). However, gender differences in language learning strategies, which especially influence second language acquisition, have not been seriously investigated as a variable. Oxford, Nyikos, and Ehrman (1988) pointed out that this exclusion of gender is rather surprising due to the fact that sex has been a serious predictor in other fields of research such as education, psychology, and linguistics.

Oxford (1990) explained that:

learning strategies are steps taken by students to enhance their own learning.

Strategies are especially important for language learning because they are tools for active and self-directed involvement which is essential for developing communicative competence. Appropriate language learning strategies result in

improved proficiency and greater self-confidence. (p.1)

Many research studies claim that females are better than males both in second and first language acquisition. As for language learning strategies, a few second language researchers report that females use a wider range of strategies than do males, especially social and affective strategies which are commonly known as communicative strategies (Ehrman & Oxford, 1989; Green & Oxford, 1993; Politzer, 1983; Oxford & Nyikos, 1989; Oxford, 1993). In fact, much sociolinguistic research suggests that females and males use different conversational strategies (Brown, 1980; Goodwin, 1990; Hirshman, 1994; Kalčik, 1975; Lakoff, 1975; Malts & Boker, 1982; O'Barr & Atkins, 1980; Steinem, 1991; Tannen, 1990/1993/1994; Thorne, Kramarae, & Henley, 1983; Trudgill, 1988; Wardhaugh, 1986; West, 1984; Zimin, 1981). Female speech is characterized by a greater use of communicative strategies such as listening well; asking questions; asking for and using slower speech; clarifying and verifying both what is spoken to them and what they say; looking for native speakers with whom to communicate; not interrupting when others have the conversational floor; and building conversation on others' remarks. In contrast, male speech is featured by arguing, interrupting, rejecting and ignoring others' comments and opinions (Hirshman, 1994). These gender-related conversational features motivates Tannen (1990) to characterize men's speech as "conflictive" and women's as "cooperative."

It has been suggested in much of the neuropsychology literature that females have certain biological advantages in language acquisition (Gur, Gur, Orbis, Younkin, Rosen, Skolnick, & Reivichi, 1982; Hecaen, De Agostini, & Monzon-Montes, 1981; Hier &

Kaplan, 1980). Much research argues that females are superior in speech function and even in auditory perception (Farhady, 1982; McGuiness, 1972; Zaner, Lieve, & Gunta, 1968). Early maturation of the speech function as well as bilateral representation of the brain in females have been identified as a primary cause for females' superiority in language. Gender differences in language are also explained from a psychological perspective that claims that females have greater social orientation, stronger affective traits such as empathy and nurturance, and a stronger desire for social approval that elicits a variety of conversational strategies (Blank, Rosenthul, Snodgrass, Depaulo, & Zuckman, 1981; Eisenburg & Lennon, 1983; Frodi & Ramb, 1978; Hall, 1978). Researchers (e.g., Lipman-Blumen, 1984) claimed that the tactful female use of communicative strategies and strong sensitivities are the skills developed by a socially subordinate group, (i.e. women must cope with the moods and behaviors of the gender which they claim to be socially dominant-men).

Oxford (1993) claimed that gender differences in first language (L1) speech behaviors transfer to second language (L2) learning strategies. In fact, a variety of female tactful communicative strategies in L1 are reported in the learning of L2 (Ehrman & Oxford, 1989; Green & Oxford, 1995; Oxford, 1993; Oxford & Nyikos, 1989; Politzer, 1983). These female-male differences appear to be strongly associated with their social status, biological and psychological traits. As for variables which affect learners' use of language learning strategies such as career orientation, years of study, cognitive styles, and levels of the proficiency of a language they learn, Oxford and Nyikos (1989) reported that motivation is the most influential factor on the choice of language learning strategies.

To date, the effect of a learner's cultural background on learning styles in language learning has not been seriously studied. However, Claxton (1990) argued for the close association between particular behavioral tendency reflecting the learner's cultural experiences and learning styles. Latino learners are tend to be field dependent and feeling oriented (Oxford, Hollaway, & Muriello, 1992), while Asian students are reported to be analytic and logical (Oxford et al., 1992). Striking differences in the learning of English as a second language between Asian students and Latino students were reported by Politzer and McGroarty (1985). The study reported that Latino students are more likely to use social interaction strategies than Asian students.

Statement of the Problem

Difficulties in learning foreign/second languages are well known to language learners and to teachers and both have struggled to seek ways to lessen the difficulties for a long time. However, it seems to be less widely known that being aware of a variety of techniques in learning language and conscious use of these techniques appropriate to particular learning tasks and context may greatly enhance the learning tasks and improve language proficiency. It is also less well known that there are significant differences between gender in the use of communication strategies; the use of the latter is greatly influenced by learners' motivation and characterized by their cultural backgrounds.

Oxford (1990) has claimed that unlike other variables influencing the progress of language learning, such as aptitude or cognitive styles, language learning strategies are readily teachable. Therefore, it is essential for language instructor to know a variety of strategies and encourage learners to be aware of what strategies are available for different

tasks and situations, and also encourage the learners to put them into constant practice. Language instructors must also be aware that gender differences, as well as cultural background and motivational level, may significantly affect language learning strategies. If there are differences between gender in the use of language learning strategies, and if cultural background and motivation affect the learners' choice of the strategies, it would be of great interest to investigate how these variables may affect the choice of language learning strategies.

Purpose of the Study

The purpose of the present study was to investigate whether or not differences exist between female and male and also between Latino and Asian ESL students in language learning strategies. This study also investigated what variables may affect the choice of language learning strategies. In short, this study had six major goals:

1. To identify differences between female and male ESL students in the use of language learning strategies.
2. To identify differences between Latino and Asian ESL students in the use of language learning strategies.
3. To identify relationships among gender and cultures (Latino and Asian), and language learning strategies.
4. To identify internal relationships among language learning strategies
5. To identify relationships between language learning strategies and the following dependent variables: (a) motivational strength; (b) motivational type; (c) self-ratings of proficiency level; (d) career orientation; (e) years studying English; (f)

- length of staying in the United States; and (g) the number of languages spoken.
6. To identify which independent variables have greatest influence on the use of language learning strategies.

Significance of the Study

It has been reported that females use a wider range of language learning strategies and use them more often than males (Bacon, 1992; Ehrman & Oxford, 1989; Nyikos, 1987; Oxford, Nyikos & Crookal, 1987; Oxford & Nyikos, 1989; Politzer, 1983). These researchers examining gender differences predict female superiority, especially in affective and social learning strategies based on the assumption that females have greater social orientation and stronger affective traits. However, these predictions, in some cases, are not strongly supported by research because the results are not always statistically significant (Nyikos 1987; Oxford & Nyikos, 1989). The reason for this slight statistical showing is that using social and affective strategies generally takes extracurricular effort on the part of students which is not likely to be rewarded or encouraged in the traditional and academic orientation of American universities (Nyikos, 1987).

Therefore, this study aims to identify potential gender differences by examining the foreign students' strategies used in an ESL program where acquiring oral proficiency (employing communicative strategies) is strongly encouraged and is a major goal for many of the students. It is anticipated that this study will provide further support for or against male-female differences as reported by previous research on gender-related language learning and learning styles.

The association between learning styles and learners' cultural backgrounds has

been reported (Brown, Collins, & Duguid, 1989; Nelson, 1995; Oxford, Holloway & Muriello, 1992; Oxford & Burry-Stock, 1995). Although association between learning styles and language learning strategies has been strongly predicted (Oxford, Nyikos, & Crookal, 1987; Oxford, 1995), to date, few studies have been conducted on the relationship between language learning strategies and cultural background (Rossi-Li, 1995). This study will identify possible cultural differences in the use of language learning strategies by examining Latino and Asian ESL students and will provide further information on the influence of cultural background on the use of language learning strategies.

This study will also examine ESL students' strategies use in relation to motivational strength/type, levels of proficiency, career orientation, length of studying English/staying in the United States, and the numbers of languages spoken, which have been identified as influencing variables on language learning strategy choice (Oxford & Nyikos, 1989). This proposed study may therefore help language instructors identify ESL learners' language strategies in light of gender and cultural differences. With increasing knowledge about learners' backgrounds, it is hoped that this study also will help language instructors develop more individualized instruction and appropriate teaching methodologies that accommodate the learners' gender and cultural differences and as well as other individual variables.

Research Questions

Using the SILL (a self-reported questionnaire, "Strategy Inventory for Language Learning," developed by Oxford, 1986), the study was designed to examine the following

questions:

1. Is there a difference between male and female ESL students in the use of language learning strategies as a whole ?
2. Are there differences between male and female ESL students in the use of the following six strategies: memory; cognitive; compensation; metacognitive; affective; and social strategies ?
3. Is there a difference between Latino and Asian ESL students in the use of language learning strategies as a whole ?
4. Are there differences between Latino and Asian ESL students in the use of the following six strategies: affective, social, cognitive, metacognitive, memory, and compensation strategies ?
5. Are there differences among Latino females, Asian females, Latino males and Asian males in the use of language learning strategies as a whole ?
6. Are there differences among the following four groups: Latino females, Asian females, Latino males and Asian males in the use of the six language learning strategies ?
7. What are the relationships among the six language learning strategies used by males, females, Latinos, and Asians and a whole ESL students ?
8. What are the relationships between the language learning strategy use and the following six independent variables: (a) motivational strength; (b) self-ratings of proficiency level; (c) years of studying English; (d) length of stay in the United States; (e) the number of languages spoken; and (f) motivational type ?

9. What is the relationship between the language learning strategies and career orientations ?
10. What are the variables that have greatest influence on the use of language learning strategies: (a) gender; (b) cultural background; (c) motivational strength; (d) years of studying English; (e) motivational type; (f) self-ratings of proficiency level; (g) length of stay in the United States; and (h) the number of languages spoken ?

Assumptions

The following general assumptions are made in this study:

1. The self-reported questionnaire employed in this study was reasonably reliable and valid for measuring language learning strategies.
2. The subjects answered the questionnaire to the best of their abilities.

Limitations of the Study

This research investigation has the following limitations:

1. The subjects involved in this study represented only two cultures, Asian and Latino.
2. The number of subjects was limited to students who voluntarily participate in answering and completing the research instrument. Therefore, the results of this study cannot be generalized to a larger population.

Definition of Terms

The following are definitions of terms that were used in this research study.

Affective variables refer to variables that affect one's emotions and feelings. The affective side of human behavior may be juxtaposed to the cognitive side of human

behavior. One's affective state and feeling involve a variety of personality factors and feelings both about oneself and about others with whom one comes into contact. The following are considered as variables that affect language learning: (a) self-esteem; (b) inhibition; (c) risk-taking; (d) anxiety; (e) empathy; (f) extroversion; and (g) motivation (Richard-Amato, 1988).

Affective and social strategies include questioning, cooperation, self-talk, and self-reinforcement.

Authentic language use includes seeking native speakers of the language being learned with whom to talk, initiating conversations in the new language, and reading authentic and natural texts.

Broca's area is “ a region of the left frontal lobe believed to be involved in the production of language” (Kolb & Whishaw, 1985, p. 752).

Communicative competence refers to a speaker's knowledge about his/her linguistic system and a conscious plan instigated to fulfill an immediate communicative need (O'Grady, Dobrovolsky, & Aronoff, 1989).

Cognitive Strategies involve the following 11 tasks and strategies: (a) repetition; (b) resourcing; (c) grouping; (d) note-taking; (e) deduction/induction; (f) substitution; (g) elaboration; (h) summarization; (i) translation; (j) transfer; and (k) inferencing (O'Malley & Chamot, 1990).

A concrete-sequential learner prefers concrete, sequential, and learner mode of cognitive styles (Oxford & Anderson, 1995).

Concurrent Validity refers to “the degree to which the scores on a test are related

to the scores of another, already established test administered at the same time” (Gay, 1987, p. 542).

Content Validity refers to “the degree to which a test measures an intended content area” (Gay, 1987, p.542).

Control Group is “the group in a research study that either receives a different treatment than the experimental group or receives no treatment” (Gay, 1987, p. 543).

Conversational input elicitation strategies include requesting slower speech, asking for pronunciation correction, and guessing what speakers will say (Oxford & Nyikos, 1989).

Corpus Callosum is a “fiber system connecting the homotopic areas of the two hemispheres” of the brain (Kolb & Wishaw, 1985, p. 753).

Dichotic listening is “a procedure of simultaneously presenting a different auditory input to each ear through stereophonic earphones” (Kolb & Wishaw, 1985, p. 754).

Dyslexia refers to “a malfunction in the brain’s synthesis and interpretations of sensory information, popularly ‘word blindness.’ It results in poor ability to read and write, though the person may otherwise excel, for example, in mathematics. (Elliot, Goldstein, & Upshall. 1992, p.354).

Empathy is the process of "putting oneself into someone else's shoes," of reaching beyond one’s understanding or feeling. It is probably a major factor in the harmonious coexistence of individuals in society (Richard-Amato, 1989, p.362).

English as a Second Language (ESL) refers to:

the teaching of English to speakers of other languages in settings where either English is the medium of instruction in the schools, the media of television, radio, and newspapers, and the language of majority (e.g., English in the United States), or where English has been designated as an official language of government or education (e.g., English in the Philippines; English in Hong Kong; English in South Africa). (Snow, 1987, p. 3)

EPI is an English Program for International Students. For this study, it refers to a peripheral college/university program in which foreign students study English in preparation for taking regular college/university courses.

Extrovert is a person who is energized by interaction with others and puts primary interest in the outer world of people and events (Richard-Amato, 1988).

A feeling learner prefers to making decisions based on his/her own feelings and emotional values. Also, the learner's decision is greatly influenced by his/her surroundings, people and situations (Oxford & Anderson, 1995).

Field dependence is “a learning style in which the learner operates holistically, perceiving the ‘field’ as a whole rather than in terms of its components parts” (O’Grady, Dobrovosky, Aronoff, 1989, p. 454).

Field independence is “ a learning style in which the learner operates analytically, perceiving the ‘field’ in terms of its component parts rather than as a whole” (O’Grady, Dobrovosky, & Aronoff, 1989, p. 454).

Formal rule-related strategies refer to strategies such as using structural knowledge, finding similarities between languages, generating and revising rules, and analyzing words (Oxford & Nyikos, 1989).

Foreign languages are languages learned in an environment where the languages are not spoken as the first language. Learners may not be exposed to foreign languages except in school settings.

Functional practice strategies include such strategies as attending foreign language films, seeking native speakers for conversation, imitating native speakers, initiating foreign language conversations, and reading authentic materials in the new language. All these strategies require practice in natural settings outside of the classroom (Oxford & Nyikos, 1989).

General Study Strategies refer to reading and study; (e.g., previewing lessons, arranging the study environment, skimming the reading passages, skimming the reading passage before reading in detail, and checking one's own performance) (Oxford & Nyikos, 1989).

A Global learner refers to learner's learning style who "learns more effectively through concrete experience, and interactions with other people" (Reid, 1995 p.ix).

Introvert is a person who tends to be energized by solitary activities and is oriented primarily towards concepts and ideas in his or her inner world (Richard-Amato, 1989).

An intuitive learner prefers to perceive the immediate, real, practical facts (Keirseey & Bates, 1984).

An intuitive-random learner prefers abstract, non-linear, or random mode of cognitive styles (Oxford & Burry-Stock, 1995).

A judging learner prefers to organize his /her study and to follow rules. This type of learner often makes hasty decisions (Oxford & Anderson, 1995).

Linguistic competence is the linguistic knowledge of a speaker which enables him/her to produce and understand an unlimited number of familiar and novel utterances (O'Grady, Dobrovolsky, & Aronoff, 1989).

Laterality refers to "side of the brain that controls a given function; hence studies of laterality are devoted to determining which side of the brain controls various functions" (Kolb & Wishaw, 1985, p. 758).

L1 refers to one's first language.

L2 refers to one's second language.

Metacognitive strategies involve the following tasks and strategies: (a) planning; (b) direct attention; (c) selective attention; (d) self-management; (e) self-monitoring; (f) problem identification; and (g) self-evaluation. (Chamot & O'Malley, 1987; O'Malley and Chamot, 1990)

A perceiving learner tends to not to worry about comprehending everything and does not feel the need to make hasty decisions or conclusions (Oxford & Anderson, 1995).

Planum temporale is located on the superior (top) surface of the temporal lobe in the cortical area of the brain. It is larger on language dominant side of the brain and contains Wernicke's area. The cortex of the brain is conventionally divided into four

lobes: frontal, located in the anterior (front) and superior (top) region; parietal, located in the posterior (back) and superior region; temporal, located in the inferior (below) and anterior (front) region; and occipital lobe, located in the back region of the brain. The frontal and parietal lobes are separated by the central fissure extending vertically on the surface of the brain. The frontal/ parietal lobes and the temporal lobe are separated by the sylvian fissure (Kolb & Wishaw, 1985).

Plasticity refers to the ability of the brain to change in various ways to compensate for loss of function due to damage” (Kolb & Wishaw, 1985, p. 761).

Predictive validity refers to “the degree to which a test is able to predict how well an individual will do in a future situation” (Gay, 1987, p 548).

Reliability The degree to which a test consistently measures whatever it measures (Gay, 1987, p.549).

Reflective cry refers to crying of one infant promotes crying of other infants. “ Reflective crying would clearly illustrate a primitive capacity for initiating and responding to peer-generated social stimuli” (Simner, 1971, p. 137)

A sensing learner prefers to perceive the immediate, real, practical facts (Keirse & Bates, 1984).

Sylvian fissure is a deep cleft on the surface of the brain which runs laterally. It separates the temporal and parietal lobes (Kolb & Wishaw, 1985).

A thinking learner prefers to make decisions based on logic and analysis and is not readily concerned with social and emotional implications (Oxford & Anderson, 1995).

Tachistoscope is “ a mechanical apparatus consisting of a projector, viewer, and screen by which visual stimuli can be presented to selective portions of the visual field” (Kolb & Whishaw, 1985, p 765).

Temporal gyli “Gyrus is a convolution of the cortex of the cerebral hemisphere” (Kolb & Whishaw, 1985, p. 756). The plural for gyrus is gyri. The temporal gyli are the convolutions on the surface of the temporal lobe.

Tolerance of ambiguity is defined as “a tendency to perceive or interpret information marked by vague, incomplete, fragmented, multiple, probable, unstructured, uncertain, inconsistent, contrary, contradictory, or unclear meanings as actual or potential sources of psychological discomfort or threat” (Norton, 1975, p. 608)

Transfer refers to “ a general term describing the carryover of previous performance or knowledge to subsequent learning. Positive transfer occurs when the prior knowledge benefits the learning tasks-that is, when a previous item is correctly applied to present subject matter. Negative transfer occurs when the previous performance disrupts the performance on s second task. (Brown, 1987, p 81)

Validity refers to “the degree to which a test measures what it is intended to measure” (Gay, 1987, p.553).

Visuo-spatial skills are one of cognitive abilities that identify the same objects in shape placed in different orientations in space, which is typically associated with the right brain hemisphere.

Wernicke’s area is located in the posterior (back) and superior (top) region of the temporal lobe of the brain. It consists of auditory association cortex. Wernicke’s is critical

to word comprehension and to production of meaningful speech. The cortex of the brain is conventionally divided into four lobes: frontal, located in the anterior (front) and superior (top) region; parietal, located in the posterior (back) and superior region; temporal, located in the inferior (below) and anterior (front) region; and occipital lobe, located in the back region of the brain. The frontal and parietal lobes are separated by central fissure extending vertically on the surface of the brain. The frontal/ parietal lobes and the temporal lobe are separated by the sylvian fissure (Kolb & Whishaw, 1985).

Overview of the Dissertation

In this chapter, statement of the problem, purpose of the study, significance of the study, research questions, assumptions, definition of terms were presented. Chapter II discusses related literature. Chapter III covers methodology which includes subjects, instruments, procedures, data collections, data analysis, and the null hypotheses. Chapter IV offers analysis of data. Chapter V presents the summary, discussion, implications, and recommendations for further research.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

Many research studies have suggested that there may be gender differences in learning styles and subsequently in the use of strategies in learning languages. Learning styles are defined as “cognitive, affective, and physiological traits that are relatively stable indicators of how learners perceive, interact with, and respond to the learning environment ” (Keefe, 1979, p. 4). Language learning strategies are the specific application of learning styles for language learning.

In addition to gender as a variable affecting one’s learning styles and its applications, much research also more recently has suggested cultural influence on learning styles and its strategy use. Merriam and Caffarella (1991) argue that, “one must consider the impact of the family, the educational system, and the culture” (p. 178) to understand individual learning strategies. Therefore, the study of language learning strategies, in relation to gender and cultural differences, must encompass variables such as human physiology, cognition, socialization, and affective traits, which directly or indirectly influence individual use of learning strategies.

First, this chapter examines the possible causes for gender differences in language acquisition, the use of language, and language learning styles. Oxford (1995) postulated that the differences in the brain laterality and socialization are two major sources of gender differences in language learning styles. Neuropsychological research studies have shown gender differences in the brain laterality indicating that the female brain is less

lateralized than the male brain in both language and spatial functions (Gur, Gur, Obrist, Younkin, Rosen, Skolnick, & Reivich, 1982; McGlone, 1980). In contrast, male brains are more lateralized than females' with the left hemisphere dominant for language and right hemisphere dominance for spatial function. These differences in brain lateralization may also be related to cognition style differences between genders (Maccoby & Jacklin, 1974; Oxford & Lavine, 1991) which are also closely associated with one's learning styles. In this study, gender differences in psychological/behavioral traits which may stylize communication modes of both males and females are also investigated. (Oxford, 1993; Snodgrass, 1985)

Recent sociolinguistic literature argues that differences in socialization between males and females have significant influences on the differences in the use of language and communication styles between them (Lakoff, 1975; Thorne, Kramarae, & Henley, 1983). These differences in communication styles and language use may be closely associated with differences in language learning styles, especially in learning style in social context. Considering these differences, the researcher postulates possible associations between physiological/psychological traits along with differences in socialization and language learning styles and strategies between males and females.

Second, this chapter examines variables influencing one's use of language learning strategies other than gender and cultural backgrounds. Motivation, career orientation, and self-ratings of proficiency have been identified as major influencing variables (Oxford, 1989) and are also discussed in this chapter. Third, this chapter examines various language learning strategies identified up to date and the typology of

language learning strategies proposed by Oxford (1990) with reference to learning styles. Language learning strategies and learning styles are further examined in relation to effective language learners and gender and cultural differences.

Previous Research

Gender Differences in Language: Physiological Explanations

Numerous studies on neuropsychology report gender differences in language development with some slight but significant favor for females. Many researchers claim greater verbal performance such as fluency, speed of articulation, and speech production for females than for males from infancy on (Gandelman, 1983; Hull, Meilke, Timmons, & Willeford, 1971; Hyde, 1981; Larsen-Freeman & Long, 1991; Maccoby & Jacklin, 1974; Mann, Sasanuma, Sakuma, & Masaki, 1990; McGlone, 1980; McGuinness, 1972; McGuinness & Pribram, 1979). On scholastic achievement tests from elementary school to high school level, females generally perform better in cognitive skills associated with the verbal performance such as in essay writing, spelling, grammar, and even foreign languages (Burstein, Bank, & Jarvik, 1980; Eisenstein 1982; Farhady, 1982; McGee, 1980; McGlone, 1980).

On the other hand, according to the literature, males have consistently displayed superiority in spatial performance including mental rotation, maze performance, mathematics, visual reasoning, and assembling blocks (Backman, 1972; Maccoby & Jacklin, 1974; McGee, 1979). Currently, more psychologists postulate, though they do not rule out social factors, these gender differences in cognitive skills are partly attributed to the differences in cortical organization and sex hormones (Sherman, Hutchens, Marsh, &

Williams, 1996)

Cortical organization.

Language function is mostly located in the left hemisphere and it is closely associated with gender and handedness. Research suggests that 95 % of right-handers are left lateralized whereas 76 % of left-handers have bilateral representation in speech function (Carter, Hohenegger, & Satz, 1980; Satz, 1979). Sex differences are also evident in the brain laterality in language function. Much research reported that the female brain is less lateralized in language function than the male brain (Gur, Gur, Obrist, Younkin, Rosen, Skolnick, & Reivich, 1982; McGlone, 1980), that is, language function in the female brain is distributed more diffusely in both hemispheres than in the male brain. In the male brain, however, language function is located with greater lateralization in the left hemisphere. Clinical studies on aphasic patients further support the diffusion of language functions since females are less likely than males to suffer speech impairment after left hemispheric damage (Hecaen, De Agostini, & Monzon-Montes 1981; McGlone, 1977/ 1980). In addition, stuttering, dyslexia, and infantile autism, among other disorders related to language, occur less often in females (Burnstein, Bank, & Jarvik, 1980; Hier & Kaplan, 1980).

Waber (1976) postulated that cortical organizations of female (language is one of the first functions to mature) would show an earlier maturational rate than that of males since females in general gain physical maturity one to two years earlier than males (Marshall & Tanner, 1970). Furthermore, the early maturers would manifest superior verbal skills. The late maturers, on the other hand would demonstrate superior spatial

functions. In fact, Waber (1976) found in her study of sex differences in visuo-spatial skills of young adolescents, that the degree of spatial and visual skills is significantly affected by maturational rate. The early maturers scored higher on verbal than spatial skills and the late maturers scored higher on spatial than verbal skills.

Waber also hypothesized that early maturers are more diffusely lateralized in speech than are late maturers and the early maturers would experience neuro-plasticity between the hemispheres more than do the late maturers. Therefore, in early maturers, both hemispheres could accommodate linguistic functions more than the late maturers. Waber's position has been supported by Witelson (1977) who has reported that language-laggers/developmental dyslexics showed stronger visual and spatial skills than normal subjects.

Recently, prenatal hormonal effects on brain laterality and cognitive functions have been implied (Hines & Shipley, 1984). Hines & Shipley (1984) report that females who had been exposed to Diethylstilbestrol (DES), a synthetic estrogen, prenatally showed stronger right ear advantage (REA), on dichotic listening tests than did their own sisters who had never been exposed to DES. The enhanced REA performance by DES-exposed females is similar to the strong REA performance by normal males. However, it should be noted that female verbal performance may be influenced by the level of circulating hormones. Hampson and Kimura (1988) explained that high levels of estrogen and progesterone were associated with improved performance on tests of verbal fluency.

Morphological differences between male and female brain further support the cortical differences in language function between the genders. In most right-handed

adults, the surface area of the planum temporale, which includes Wernicke's area for auditory association, in the left hemisphere is larger than the right (Galaburda, 1984; Geschwind & Levitsky, 1968). The same asymmetry was found in infants and also in the fetal brain (Chi, Dooling, & Gilles, 1977). Broca's area, which engages in speech production, was also found to be larger in the left hemisphere than the right in both adults and infants (Falzi, Perrone, & Vignolo, 1982).

Weight differences between the hemispheres are significantly smaller for females than males (McGlone, 1980). Wada, Clark, & Hamm (1975) and Witelson and Kiger (1988) reported that Sylvian fissures and temporal planums in the female brain are more symmetrical than in the male brain, whereas the temporal gyri in the male brain is more asymmetrical than in the female brain (Kopp, Michael, Carrier, Biron, & Duvillard, 1977). Gender differences have also been reported in the structure of the corpus callosum, "the main fiber tract connecting two cerebral hemispheres" (Witelson & Kiger, 1985). Holloway and de Lacoste (1986) reported that females have significantly larger callosum area. These data, suggesting a lesser degree of structural asymmetry along with the larger corpus callosum identified in the female brain, further support the claim that female language function is more evenly distributed and they also suggest possible greater interhemispheric communication (Sherman, Hutchens, Marsh, & Williams, 1996). It appears that bilateral representation of language function along with early cortical maturational rate allows the female greater verbal functions.

Auditory perception.

Females' superiority in auditory performance has been extensively reported.

Studies on the auditory threshold indicate that females are better in hearing high frequency sounds than are males (Gandelman, 1983; Hull, Mieke, Timmons & Willeford, 1971; McGuinness, 1972). Females are also more sensitive to sound intensity and changes of sound intensity (McGuinness, 1972; Zerner, Levee, & Gunta, 1968). Females' greater auditory performance has also been reported in second language acquisition. Farhady (1982) found that female subjects significantly outperformed male subjects on a listening comprehension test in his study of 800 foreign university students. This female superiority in auditory performance may be both inherent and developmental.

Second language acquisition.

To date, few studies have been conducted on the relationship between (L2) acquisition and male-female right hemisphere involvement. Evidence from the studies which exists, however, has been inconclusive. Several studies have found a greater involvement of the right hemisphere in later learned language (Gordon & Zatorre, 1981; Silverburg, Bentin, Gaziel, Olber, & Albert, 1979). Other studies reported greater left-hemisphere involvement in acquiring L2 (Galloway, 1980). Several other studies concluded an equal involvement of both hemispheres in (L2) acquisition (Galloway & Scarcella, 1982; Sussman, Franklin, & Simon, 1982). Furthermore, evidence from clinical studies on bilingual and multilingual patients is also inconclusive.

Gender Difference in Language: Cognitive Styles-Field Independence and Dependence

Field independence and dependence are cognitive styles of learning which have been extensively studied in the realm of education (Witkin, Moore, Goodenough, & Cox, 1977). Field independence-dependence dichotomy is defined as

the extent to which a person perceives part of a field as discrete from the surrounding field as a whole, rather than embedded in the field; or the extent to which the organization of the prevailing field determines perception of its components; or ...the extent to which the person perceives analytically. (Witkin et al., 1977, p. 6-7)

Witkin et al. however, noted that field independence-dependence is a continuum distribution of one's cognitive style. Therefore, there is no person who is completely field independent nor field dependent. Although research on application of this cognitive style for educational problems is still in the early stages, the concept of field independence-dependence continuum has rapidly developed and been adopted as a major learning style. Field independent learners tend to be analytical and enjoy abstract and impersonal work (Witkin et al., 1977). They prefer working individually and relying on their own standard (Ramirez & Castaneda, 1974; Witkin et al., 1977). They are likely to be less sensitive to social context, more logical and prefer structured learning (Chapelle, 1995). Field dependent learners, on the other hand, tend to be sensitive to their environment. They make decisions based on others' opinions and guidance and depend on others for information and approval (Chapelle, 1995; Witkin et al., 1977). They do not prefer an analytical style of learning and are more likely to be global thinkers (Violand-Sanchez, 1995; Witkin, Moore, Goodenough & Cox, 1977) than their field independent counterparts.

In relation to language learning, field independent learners may prefer learning rules finding patterns, and making generalizations (Chapelle & Roberts, 1986). In

contrast, field dependent learners may prefer learning through interactive exercises where acquiring rules is not emphasized (Abraham, 1985). Therefore, both field independent or dependent learners have advantages and disadvantage in language learning. However, research studies have found that field independence is more likely to be correlated with success in language learning than field dependence (Carter, 1988; Chapelle & Roberts, 1986; Hansen & Stanfield, 1982; Naiman, Frolich, Stern, & Todesco, 1978).

Research evidence suggests that field independence and dependence are also associated with small but persistent gender differences, with males more field independent and females more field dependent (Maccoby & Jacklin, 1974; Oxford & Lavine, 1991; Ramirez & Castaneda, 1974; Witkin et al., 1977).

Field independent/dependent cognitive style is also linked to cerebral dominance. Research studies on the relationship between cerebral lateralization and field independence/dependence have shown contradictory results but have generally supported Witkin, Goodenough, & Oltmans' (1979) hypothesis that a field independent person may have greater hemispheric specialization than a field dependent person. For instance, Dawson (1977) reported that persons with stronger right ear advantage for verbal processing, (i.e., showing greater left hemisphere involvement than the right hemisphere) tend to be more field independent. The research experiment measuring the amplitude of electrical activities of the brain hemispheres has shown significantly higher correlation between left and right hemispheres among field dependent subjects (Oltman, Semple, & Goldstein, 1979). The studies measuring hemispheric dominance for verbal stimuli employing tachistoscopic visual field and dichotic listening tests have also reported

greater hemispheric differences among field independent subjects (Manning & Fernandez-Ballesteros, 1985; Pizzamigilo, 1974).

Gender and Language: Psychological and Behavioral Explanations

The superior communicative skills and tactful use of languages of females may be attributed to their greater social orientation triggered by psychological/behavioral traits such as stronger empathy, keen sensitivity to others, and nurturance. Also, their need for social approval and desire to please people (Oxford, 1993) have an influence on their language use. On the other hand, male characteristics such as aggression and dominance also stylize their speech into interruption, ignoring and rejecting others' opinions, and dominating conversation. However, none of these speech styles are considered superior communicative tactics. Gender differences in these psychological/behavioral traits have traditionally been considered acquired through environment (i.e., social interactions and gender-role expectations). Recently; however, biological explanations have been offered by psychologists. Sherman, Hutchens, Marsh, & Williams (1996) explain that, "behavioral differences ...between sexes may be, at least in part, due to differences in cortical organization and to differing levels of circulating sex hormones" (p. 61).

Empathy.

Empathy is defined as "the quality of being sensitive and responsive to the feelings of others" (Lips, 1993, p.115). Eisenburg and Lennon have argued that research evidence in gender differences in empathy has shown inconsistent results mainly because data collecting methods have been shown to be flawed. However, where gender difference exists, it tends to favor females over males. In the review of sex differences in

empathy by Eisenburg and Lennon (1983), they reported gender differences in empathy favoring the female is the greatest when subjects are asked to rate their own responses to emotional and sympathetic situations (e.g., Frodi & Lamb, 1978). Stronger female empathy is also evident in decoding nonverbal cues. Hall (1978) reported that females are better at decoding visual and auditory cues than males. Blanck, Rosenthal, Snodgrass, Depaulo, & Zuckman (1981) also reported female superiority in decoding cues from facial and body movements. Stronger physiological responses by female infants in reflective crying has also been reported (Hoffman, 1977; Simner, 1971). This evidence suggests that being empathetic to others may be a stronger female quality, whether innate or learned.

Stronger female empathy may engender many superior conversational skills. Females listen to others well and tend to build conversation on others' remarks. Hirshman (1994) reported that females more often acknowledged others' opinions and tried to build conversations on them. Tannen (1990) also pointed out that females, in general, show more interest, support others' opinions and ideas, and elaborate others' speech in conversational interaction than males with greater physical involvement such as gazing straight into the eyes, touching others, and physical proximity.

Sociolinguists propose that strong female sensitivity is a by-product developed by their potential subordinate position to males in our society. According to Snodgrass (1985), people with subordinate status generally have to develop more sensitivities to others' feelings than people of higher status. Therefore, according to Snodgrass's view and not this researcher's, the greater sensitivity of women is a skill developed by their

lower status in societies.

Conformity.

Greater empathy and sensitivity of females, often attributed to their subordinate position to males in society, may induce them to be more conforming than males.

Maccoby and Jacklin (1974), in their review of 30 studies of conformity, reported that girls have a tendency to conform more easily than boys. Lips (1993) also argues that “among adults, when gender differences are found, they are usually in the direction of greater female conformity”(p.109).

Eagly, Wood, and Fishbaugh (1981) discuss greater female conformity in view of the gender role expectation with more emphasis on the non-conforming tendency of males (males in general are expected to be independent and less concerned about others' opinions) rather than the female conforming tendency. Eagly et al. (1981) have argued that the stronger conforming tendency of female may be caused by “their concern about seeking harmony in interpersonal relationships ”(p. 384). Eagly and Wood (1982) also have explained the gender difference in conformity emphasizing more on the status difference between the sexes in society in which men are viewed as initiators of actions and women as the passive recipients of their influence. They argue that “as agents of influence, men are regarded as more dominant and influential and as more effective leaders than women. As recipients, women are regarded as more submissive, conforming, and easily influenced than men” (p. 916).

This strong conforming tendency of females over males has also been observed in their speech patterns. Female tendency to follow the standard linguistic norms of a

language in a given society has been reported in sociolinguistic literature. (Hudson, 1980; Jahangiri, 1980, Sankoff & Cedergren, 1971; Shuy 1969).

Aggression

As is shown below (p.34), aggression also often plays a part in male/female language differences. Male aggression is an established finding (Ong, 1981; Renfrew, 1997). Arguments for greater male aggression have been based more on biological than on socio-cultural evidence of aggressive behavior (Renfrew, 1997). To support this claim-- that aggression is primarily a male trait-- is also clear from the FBI's 1991 crime reports (FBI, 1991) in which the number of reported homicides committed by males was five times as great as those committed by females. The number of arrests of males for murder is more than seven times as large as that for females.

Gender difference in aggression has been demonstrated in experiments using both human and animal subjects. Lagerspetz (1979) reported on his experiments on isolation-induced aggression using mice. He used only male mice because female mice did not show much aggression. Stronger aggression in males has been observed in other animals such as dogs, rats, and primates; however, a few studies reported strong female aggression. Hood and Cairns (1988) reported that maternal aggression increases in females following selective breeding. Yet females are less aggressive than males in isolation.

As for studies in human aggression, the results are fairly consistent. Lagerspetz, Bjorkqvist, & Peltonen (1988) reported that boys ranging in age from 11 to 12 are more physically aggressive than females in provoking situations, whereas girls expressed their

aggression in indirect ways such as telling lies, ignoring, and ostracizing. Boys' aggression is revealed not only physically but also psychopathologically. Meyer-Bahlburg (1981) reported that boys express their aggression through imitation of the aggressions of others, rough-and-tumble play, and aggressive fantasies. Evidence in homicides suggests that aggressive behavior as a male trait becomes quite tangible when males are in conflict with other males (Daly & Wilson, 1988).

The relationship between testosterone, a major hormone produced in the testes, and aggression has been widely reported. In the experiment on animals, levels of testosterone are clearly related to aggression and sexual behavior (Renfrew, 1997). Although the relationship between levels of testosterone and aggressive behavior in the case of human beings is far more complicated than it is in animal experiments, a positive relationship between human aggression and the level of testosterone has also been reported. Ehrenkranz, Bliss, and Sheard (1974) reported that levels of testosterone in blood is significantly higher among violent and dominant inmates than among non-violent inmates. Similar results were reported by Persky, Smith, and Basu (1971). They also found the positive correlation between plasma testosterone level and the degree of self-reported aggression among young adolescents

In relation to aggression, dominance is also associated with male characteristics (Maccoby & Jacklin, 1974). Research evidence suggests that people with a highly dominant personality, regardless of gender, tend to associate themselves with a leader (Nyquist & Spence, 1986) and males are more likely to assume a leadership role than females both in mixed and same gender groups. The degree of dominant behavior is also

different between genders. Males tend to form a structured hierarchy in their groups and a leader manipulates the whole group (Aries, 1976) whereas female groups are less structured and also less hierarchical (Paikoff & Savin-Williams, 1983). These two stronger male dispositions, aggression and dominance, may have a profound influence on conversational behavior of males and females. Tannen (1990) reported that males tend to engage in verbal conflicts whereas females tend to avoid conflicts. Male dominance is typically manifested in controlling conversational topics, interruption, and ignoring comments and opinions initiated by females (Hirshman, 1994).

Gender Differences in Speech Behavior: Sociolinguistic Explanation

Gender difference in speech behavior in the Western world has long been interpreted within an framework of men-dominate-women (Fishman, 1978/1983; Henley & Kramarae, 1991; Johnson, 1983; Lakoff, 1975; Spitzack & Carter 1987; Thorne, Kramarae, & Henley, 1983). Men's speech is commonly acknowledged as speech of power and is manifested in their linguistic strategies and features such as interruption (Steinem, 1991; West, 1984), volubility (Fishman, 1978) and topic initiation (Aries, 1976/1987; Steinem, 1991; Witting, 1992). In contrast, women's speech is interpreted as “powerless speech” (O’Barr & Atkins, 1980) and emphasizes solidarity among speakers (Tannen, 1990). Women's powerless speech is manifested by such strategies as politeness (Brown,1980; Coates, 1986; Kalčik, 1975), indirectness (Holmes, 1988; Kalčik, 1975), and taciturnity (Swacker, 1975).

Power-powerless relationships between males and females have a strong influence on human behavior, mostly on verbal and nonverbal interactions as well as on how each

gender sees the nature of human relations. For example, men's conversational style is collectively characterized as *conflictive* whereas women's in general is viewed as *cooperative*. Tannen (1990) states that males are likely to see conversation as a contest in which they display performance and knowledge in order to establish their status in hierarchical social structures. In contrast, women view the purpose of conversation as creating rapport and closeness so as to establish solidarity (Aries, 1976; Kalčík, 1975; Malts & Borker, 1982; Steinem, 1991; Swacker, 1975). In line with Tannen, Dumas (1991) emphasizes the fact that males and females use language differently:

In general, women appear to use language as a way of connecting, nurturing, and reassuring while men appear to use language as an opportunity for 'one-upmanship.' For women, language is win-win; men strive to ensure that language is an 'I win, you lose' activity. (p. 13-14)

A number of gender-related speech styles--disputing, ignoring and rejecting others' comments and opinions as well as listening well, building conversation on others' remarks, and questioning and nodding to show involvement -- are closely associated with these different points of view about the nature of conversation between genders.

Nature of Speech Behaviors: Conflict and Harmony

To support Tannen's view, much research (Hirshman, 1994; Lakoff, 1975; Malts & Boker, 1982; Witting, 1992) consistently suggests that males tend to engage in verbal conflicts whereas females tend to avoid conflicts (Jones, 1980; Tannen, 1990). The male's stronger conflictive nature has also been reported by numerous psychologists (Lagerspetz, Bjorkqvist, & Pelton, 1988; Meyer-Bahlburg & Ehrhardt, 1981)

Gender-related speech behaviors reflect different types of gender appropriate activities and social behaviors in which females and males engage from early childhood. Psychologists Maccoby and Jacklin (1974) have observed the preference of females for the use of social skills in group affiliations. Females are quick to establish personal relationships which are characterized by cooperative activities. These cooperative activities are accompanied by nurturing behaviors. Even when they are young, females display an intensity and empathy with others in small groups which is not present in the group interactions of males. Girls' speech style reflects their social behavior. They try not to criticize, or being overly aggressive or bossy to others in their group. Instead, suggestion and indirect expressions are frequently employed in order to develop intimate friendships and equality among them (Maltz & Borker, 1982).

Males on the other hand, prefer being in larger groups featured by dominance and aggression hierarchies (Maccoby & Jacklin, 1974). In the hierarchical organization, a leader tells the others what to do and they follow the order. Boys naturally learn to give and receive orders in order to establish their individual status and to communicate with each other in hierarchical structures (Goodwin, 1987). Thus, their speech behavior is characterized by ordering commands, ignoring and rejecting other's opinions, controlling topics, volubility, and getting attention.

The key feature of women's speech is interactional in which maintaining the conversation is of utmost importance in order to establish and support a close relationship (Kalčík, 1975; Maltz & Borker, 1982). Tannen (1990) argues that females in general see the community as a source of power and they struggle to avoid being cut off from the

community . Tannen continues, that, for them, speech is the means to establish a connection, rapport, and closeness among members of a society. Sharing sameness, similarities, and personal experience are frequently emphasized, and also conflicts/disputes are avoided at all costs to keep solidarity among members. Therefore, female speech styles are characterized by suggestions/proposals to avoid giving orders, building conversation on others' remarks, questioning, chiming in, and initiating topics to facilitate conversation, listening well, nodding, and paying attention to show involvement.

In the next sections, gender-related speech behaviors that have traditionally been viewed as characteristic of either male or female speech, such as interruption, taking the conversational floor, and indirectness/politeness, are discussed. Tannen (1990/1993) however, pointed out the bi-directional and multiple meanings of these speech behaviors. For example, interruption has been viewed as a sign of dominance and is a feature of male speech. Nonetheless, females do interrupt conversation not to show dominance and control but to show involvement and to promote conversation. This example explains that interruption has multiple meanings. It functions either to hinder or to promote conversation and is employed by both males and females. Therefore, gender-related speech behaviors are first discussed within the framework of "power and solidarity." Following this discussion, Tannen's claim will be considered.

Interruption

It has been consistently reported in sociolinguistic research (Lakoff, 1975; West, 1984; Zimmerman & West, 1975) that men interrupt conversation more often than do

women and this stereotypical pattern is regarded as clear manifestation of male dominance over females. In sociolinguistic literature, interruption is typically viewed as speech of power and is typically carried out by the socially dominant group, males over the subordinate group (Maltz & Borker, 1982; Zimmerman & West, 1975). Maltz and Borker (1982) reported the characteristic of male speech in comparison to that of women, “men are more likely to interrupt the speech of a conversational partner. They are more likely to challenge or dispute their partner's utterances and use more mechanisms for controlling the topic of the conversation” (p. 198)

Tannen (1994), however, claims that part of the reason for the typical findings about this men-interrupt-women-pattern appears to be caused by the mechanical conversational observation in which the number of interruptions is simply counted and added up. In the typical situation, interruption is seen as a violation of conversational rules and a speaker's right. Therefore, it is a manifestation of dominance. However, interruption does occur in friendly conversation and in supporting a speaker's ideas. The men-interrupt-women structure might be true when a conversation is carried out more in the public than in the private domain (Coats, 1986). On the contrary, in private and friendly conversation, women do interrupt (Tannen, 1990).

Subsequently, Tannen points out the different nature of interruption between genders. According to her, when women interrupt a conversation, they do so in order to show interest, support a speaker's ideas, and elaborate others' speech. In contrast, men interrupt in order to show their knowledge and lead the conversation. In other words, women's interruption is cooperative and men's uncooperative.

Taking the conversational floor.

In regard to the issue of interruption, gender difference in speech behavior has often been discussed as " a man or a woman, who gets the conversational floor more often." Edelsky (1993) identified two different types of conversational floor: collaborative and singly-developed floors. A collaborative floor refers to two or more people talking simultaneously and occurs more often in women's speech. This conversational style occurs in order to joke, argue, suggest, solicit responses, making supportive comments, and to validate one's point. Kalčík (1975) claims that this speech style occurs frequently in telling personal stories among females and is often considered trivial or is figuratively characterized by Goffman (1967) as "happy babble of disorganized sound" (p. 40). However, Kalčík (1975) argues that this conversational style is employed to bring conversationers close together in order to share a common bonds and common problems, namely to achieve closeness and harmony among them.

On the other hand, a singly-developed floor refers to taking the floor one person at a time and is typical of men's speech. Edelsky observed that men speak almost one to four times as much as do women when they take single floors. In contrast, women and men speak roughly equally in collaborative floors. Based on these results, Edelsky postulated that women's speech is more collaborative and proactive and serves everybody's interests in a speech group by enticing other speakers to participate in conversations. Therefore, women's speech is associated with high involvement, synergism, and solidarity building interaction (Jones, 1980; Tannen, 1994). In contrast, men's speech is characterized as a monologue that is single-handedly controlled. Men's

speech is also featured as hierarchical interaction in which taking conversational floors is achieved by winning-losing turns in conversational competition (Witting, 1992).

Topical nomination.

Raising topics have been seen as a sign of dominance in which men are assumed to raise more topics than females in conversational interaction (Aries, 1976). However, Tannen argues that speakers who raise topics might not necessarily dominate the conversation. She suggested that differences in individual speech styles are associated with raising topics. According to Tannen, an individual who hastily thinks that other speakers do not have anything more to say on a topic might raise another topic, whereas an individual who waits for his/her conversational turn after an appropriate length of pause might lose opportunities to raise a new topic. Similarly, Fishman (1983) reported in her observation of conversational interactions among college students that female students initiate topics one and a half to two times as often as males along with more frequent use of the interaction strategies such as questioning, chiming-in, and saying minimal responses (e.g., “yeah,” “umm,” and “huh”). Based on this observation, Fishman speculated that females feel more responsible to play the role of facilitator for conversational interactions to flow and to continue by initiating more topics and using these interactional strategies.

Indirectness

Indirectness and politeness are communicative strategies developed by those without power to get their meaning across to those with power, and this is, therefore, typically associated with women's speech. In fact, women's speech is cross-culturally

acknowledged as being more polite than men's (Brown 1980; Goodwin, 1990; Lakoff, 1975; Malts & Borker, 1982). Much research has tried to explain indirectness as a factor for differences in power between genders in our society in which females take a subordinate position. Lakoff (1975) argues that male-dominant society shapes women's personal identity by disapproving of women's attempts to express themselves directly and assertively. Instead, it makes women to express themselves with uncertainty using hesitation, questioning, tentativeness, trivialization, and politeness. Brown (1980) further argues that "women in general speak more formally and more politely, since woman are culturally relegated to a secondary status relative to men and since a higher level of politeness is expected from inferiors to superiors" (p. 113).

However, Oxford noted that all these assumptions were made based on the notion that females have a lower status than males in our society, and this notion more or less might affect the researchers' interpretation of gender-related conversational behavior.

For Tannen (1994), indirectness is also a strategy to promote rapport and solidarity among speakers. She adds that making demands or statements without employing direct forms can be a token of power and privilege by explaining that "ultimate indirectness is getting someone to do something without saying anything at all" (Tannen, 1994, p. 226).

In English, women's speech is also characterized by the use of polite forms (Coats, 1986; Trudgill, 1972). For example, using tag questions, expressing statements and opinions with rising intonation, which are usually associated with a question, are the most commonly employed speech styles to express politeness (Lakoff, 1975).

Indirectness, however, has to be understood within a cross-cultural perspective because indirectness as a female communication strategy is not universal (Tannen, 1990/ 1994). For example, Keenan (1974) reported in his observation of Malagasy-speakers (a language on Madagascar island) that indirectness is a speech employed by males and is the norm in the language, whereas women use direct forms associated with the uneducated and less powerful. Indirectness, therefore, is not a strategy exclusively used by powerless females, but can be employed by both the powerful and the powerless. Using indirect expressions can often be an influential communication strategy, and it depends upon the relationship and status of speakers in conversation. According to Tannen (1990/1994), speakers' intended meaning, whether it is for dominance or solidarity, has to be understood in the individual speech context as well as in its cultural context.

Following existing linguistic norms.

In relation to indirectness and politeness that characterize female speech, it is also reported in sociolinguistic literature that females tend to follow the standard linguistic norms and less use of vernacular variables of a language in a given society than do males (Brown, 1980; Thorne, Kramarae, & Henry, 1983). Phonological differences between the speech of men and women have been observed in a variety of languages. In Montreal, for example, many more men than women do not pronounce the *l* in the pronouns and in the articles *il*, *elle*, *la*, and *les* where pronouncing the *l* is the norm of their language, French (Sankoff & Cedergren, 1971).

The rate for deleting final nasal consonant in such the word “man” /mæŋ/ that is

produced as /mæ / is higher in male's speech than in female's (Shuy, 1974). In Persian, vowel assimilation is a violation of a phonological rule and is not preferred. It is also associated with lower educational attainment. In this society, females also show greater tendency to follow the phonological rules, whereas men use more vowel assimilation than women (Jahangiri, 1980).

These examples illustrate females' greater acceptance of social/linguistic norms. Wardhaugh (1986) pointed out females' desire to follow the standard linguistic norm from the point of the power structure between the genders:

Men, traditionally a socially and economically more powerful group, have a greater chance for upward mobility. In contrast, 'women tend to be kept in their place but aspire quite often to a different and better place.' Therefore, women seem to be more conscious about the use of language which they associate with their 'betters' in society. (p. 322)

Trudgill (1972) also offered an explanation for female using more standard/prestige forms from the points of male's greater opportunities to gain desirable status and careers in the society:

Men in our society can be rated socially by their occupation, their earning power, and perhaps by their other abilities - in other words by what they do. For the most part, however, this is not possible for women. It may be, therefore, that they have instead to be rated on how they appear. Since they are not rated by their occupation or by their occupational success, other signals of status, including speech, are correspondingly more important.

(p. 183)

Conversational topic and involvement.

Gender difference in speech behaviors is also manifested in the degree to which females generally show greater involvement both verbally and non-verbally (Kalčík, 1975). Tannen (1994) conducted an observational study with eight different same sex pairs who ranged in age from seven to 25. According to her study, it appears easier for females to select topics for their conversation. They talk on one topic for a longer period with fewer topic changes. In contrast, males take a longer time to select topics, and each topic is short-lived. Once topics are selected, the females tend to focus more tightly on selected issues but males tend to diffuse the topics and discuss them on a more abstract level. Females elaborate topics with many subtopics and references. There is also a cohesion from one story to the next. In male conversation, on the contrary, topics are not elaborated, and there is less cohesion among stories. As for topics of the conversation, females discuss personal matters with great detail such as intimacy, feelings, marriage, and the loss of close friends. Although males discuss personal matters, they do so on more theoretical and abstract levels.

Tannen (1994) also observed the male-female differences in physical involvement. When females engage in conversation, they sit face to face and they gaze straight at each other. In contrast, the males sit more or less parallel or at angles to each other and they divert direct eye contact. Physical engagement in conversation among the females is also characterized by occasional touching and physical proximity. Males, on the other hand, do not touch each other nor do they move closer.

In addition to physical involvement, Tannen (1994) observed linguistic involvement of sixth grader girls. Their speech is characterized by “sharp shift in pitch, strong empathetic stress on many words, intonation which rises and remains steady at the end of phrases, and elongation of vowels” (p.110). These linguistic features also represent strong emotional and empathetic involvement in the conversation by females.

Judging from these differences between genders, it appears that females are more easily involved and feel more comfortable in small (group/pair) conversational interaction. Part of the reason for this female greater involvement in conversation might be attributed to stronger interest in and empathy for others. It is frequently reported that reacting to others’ remarks empathetically by touching, using body language and eye contact are female communicative skills (Lips, 1993; Wardhaugh, 1986). Also, sitting inside of a room and talking in a small group are typical self-selected activities for females from childhood on. Thus, small group conversation is reported as being a more suitable activity for females than for males (Goodwin, 1990; Lever, 1978).

Similarly, Fishman (1978) reported in the observation of interaction of mixed gender pairs that women are more actively engaged in insuring interaction by asking more questions, initiating more topics, and using more attention beginnings. Thus Fishman argues that “women do support work while the men are talking and generally do active maintenance and continuation work in conversations” (p. 404). On the contrary, support work in conversational interaction is noted less in men because men report greater confidence in asserting their topics and they expect responses. However, topics initiated by women are often dispensed with quickly or are not given much weight. Fishman calls

this female greater involvement to maintain conversation “interactional manifestation of power relations” (1978, p. 397) because females must deal with males with greater uncertainty in succeed in conversational interaction.

Possible Causes of Gender Differences in Speech Behaviors

Gender differences in speech behavior have been a topic of diverse disciplines such as psychology, sociology, sociolinguistics, and anthropology, and only limited collaborating evidences available (Aries, 1987). The following are the possible causes of gender differences in communication behavior postulated by the researcher.

First, gender differences in language should be considered within the framework of men-dominate-women, a power relationship that creates substantial differences in gender-related speech acts. Socially dominant males interrupt more often, produce more speeches, and initiate more topics whereas women who are socially subordinate produce less speech and use polite and indirect expressions more often than men. Politeness and indirectness are the effective communicative strategies developed by socially subordinate groups (i.e., women coping with male moods and behavior (Lipman-Blumen, 1984)). Women's tactful communicative strategies, politeness and indirectness are the result of their greater empathy and sensitivity and also their lower social status. Snodgrass (1985) argues that people with subordinate status generally have to develop more sensitivities to others' feelings than people with higher status as a matter of survival.

Second, gender difference in speech behavior comes from how each gender sees the nature of human relations and conversational interaction. Females see speech as a

means to establish a connection, rapport, and closeness among the members of the society (Tannen, 1990). Males, on the other hand, acknowledge speech communication as a method to establish individual status and power in hierarchical society (Goodwin, 1987). This is closely associated with gender related social behavior and psychological traits. Maccoby and Jacklin (1974) argue that females are inclined to gentler aspects of interpersonal relationships that are less aggressive and active. Females are also more cooperative and less competitive. In contrast, males prefer being in larger groups featured by dominance and by an aggression hierarchy. Theories of psychology explain that sensitivity, empathy, nurturance, and emotion are strong female traits, whereas aggression, dominance, assertiveness, and emotional inexpressiveness are male traits. These behavioral and psychological traits of males and females are manifested in their speech patterns. Male speech patterns are characterized by interruption and topic-nomination, ignoring and rejecting other's comments/opinions and other's conversational floors, and by being intrusive, and argumentative (these traits are commonly described as "power"). In contrast, female speech is characterized by being cooperative, empathetic, and responsive to other speakers (these traits are commonly described as "solidarity"). It has to be noted however, that male/female behavioral/speech traits are closely associated with a social structure where men dominate women.

Third, gender difference in speech pattern may partly be attributed to gender-role appropriate social expectations on each gender and a speaker's desire to conform to his/her projected image. Females are expected to be "feminine." This gender role expectation assumes them to behave like "ladies" who should not be assertive nor

controlling and somewhat sound insecure (Lakoff, 1975). On the other hand, males are expected to be “masculine” which demands men to be non-conforming, independent, and influential. Males and females acquire these gender-specific behavior from early childhood, age five to 15 (Aries, 1987). During this period, “members of each sex are learning self-consciously to differentiate their behaviors from that of the other sex and to exaggerate these differences” (Malts & Borker, 1982, p. 203). Females’ constant use of indirect, polite, and a standard form of a language, especially reflects their gender-role expectations. In contrast, social expectations on males manifest in their speech styles (i.e., dominant, controlling, and intrusive). It has to be noted that these gender-role social expectations are also the reflection of their status in our society.

Possible Association between Gender-related Speech Behavior, and Language Learning Strategies

To date, few studies have mentioned the relationship between gender-related conversational behaviors and gender-related language learning strategies (Ehrman & Oxford, 1989; Green & Oxford, 1995; Nyikos 1987; Oxford & Nyikos 1989; Oxford, Park-Oh, Ito, & Sumral, 1993; Politzer 1983). However, possible relationships among gender-related personality profiles, conversational behaviors, and language learning strategies have been implied in numerous studies in second language, sociolinguistics, and psychology.

For example, studies in psychological literature report the possible associations between gender-related psychological traits such as aggression, empathy, sensitivities to others and nurturing behaviors, and linguistic and non-linguistic behaviors (Maccoby &

Jacklin; 1974). Recent sociolinguistic studies also explain the differences in the use of languages between genders based on the differences in male-female behavioral and affective traits as well as their social status. Both sociolinguists and psychologists claim that the language used by females reflects their greater interests in interpersonal activities, and desire to create rapport and closeness, and tendency to conform social and linguistic norms as well as subordinate positions in the society (Lipman-Blumen, 1984; Maccoby & Jacklin, 1974; Snodgrass 1985). In contrast, language used by males reflects aggression, dominance, and conflict (Oxford & Nyikos, 1989; Politzer, 1983; Tannen, 1990/1993). Numerous studies on second language and neuropsychology also report gender difference in language proficiency and its development with strong favor for females (Eisenstein, 1982; Farhady, 1982; Gandelman, 1983; Hyde, 1981; Larsen-Freeman & Long, 1991; Maccoby & Jacklin, 1974; McGlone, 1980; McGuinness, 1972).

These sociolinguistic, biological, and psychological differences are intertwined and have significant influence on L1 speech behaviors and L2 learning strategies. Oxford (1993) claimed that L1 differences between genders transfer to L2. In their speech, expresses more concern, deference, empathy, encouragement of other speakers, negotiation, and submersion of personal identity (Fishman 1978; Lakoff 1975; Tannen, 1990) In contrast, male L1 speech is characterized by dominance, interruption, ridicule, aggression and adversarial-argumentative style (Tannen, 1990/1994).

Much second language research suggests that these gender-related speech styles are transferred to the L2. Gass and Varonis (1986) claimed that although male dominate L2 conversations, female initiate more topics in order to facilitate conversational

interactions and try to understand other speakers and clearly communicate with them. Eisenstein (1982) reported that females are more sensitive than males to the difference in dialects of the L2 (whether they are socially prestigious or not). Females' L2 strategies are also characterized by frequent questioning, interacting with others, using linguistic and non-linguistic cues to decode meaning, and sharing feeling and thoughts with others (Ehrman & Oxford, 1989; Oxford & Nyikos, 1989; Politzer, 1983), which are all characteristics of female L1 speech styles. In fact, many research studies in the use of L2 strategies reported that females use a variety of social and affective strategies and that they use these strategies more often than males (Ehrman & Oxford, 1989; Green & Oxford 1995; Nyikos 1987; Oxford & Nyikos 1989; Oxford, Park-Oh, Ito, & Sumrall, 1993; Politzer 1983). Female strategy use in learning a L2 might be strongly associated with female tactful use of conversational strategies in their L1 such as listening well, building conversation on others' comments and opinions, questioning, discussing one's feeling with others, and empathizing with others. Female superiority in using communicative strategies might also be related to their social and affective behaviors in which they are more cooperative, less competitive, and emphasize closeness (Tannen, 1990/1993).

Gender differences in the use of L2 strategies are also consistent in that females use a wider range of metacognitive strategies and they use these strategies more frequently than males. Metacognitive strategies, such as paying attention, organizing one's study, and evaluating progress are general tactics for making good grades in school. These female characteristics might be closely associated with a continuing need for social

approval and a desire to please others through good grades and social behavior (Mansnerus, 1989; Nyikos, 1990). The use of metacognitive strategies is not directly manifested in language behavior. However, strategies, such as females' frequent use of seeking opportunities to practice native-like pronunciation, accent, word-usage with native speakers, are the indication of their strong desire to conform to the linguistic norms and to assimilate themselves into the target language society.

Variables Affecting Choice of Language Learning Strategies

Motivation.

Oxford (1989) itemized the factors affecting the choice of language learning strategies. These include: (a) the language being learned; (b) the level of language learning; (c) the degree of metacognitive awareness; (d) sex; (e) affective variables; (f) specific personality traits; (g) overall personality type; (h) learning style; (i) career orientation; (j) national origin; (k) aptitude; (l) language teaching methods; (m) task requirement; and (n) type of strategy training.

Oxford, Park-Oh, Ito and Samul (1993) reported that the degree of motivation is a significant predictor for language achievement. Oxford and Nyikos (1989) reported in their study of 1,200 college language students, that motivation was the single most influential factor among the influential variables in the choice of language learning strategies. Intensity of self-ratings of motivation was highly associated with most of the individual strategies the subjects used.

Gardner (1985) stated that motivation is a prime determining factor for language learning. Not only language learning but also every human task depends on how well one

is motivated to perform tasks. Motivation is commonly viewed as a key for success. From a psychological point of view, "human beings has needs or drives that are more or less innate, yet their intensity is environmentally conditioned" (Brown, 1980, p.112). In terms of language learning, motivation is traditionally classified into two categories: the integrative motivation, which is based on a desire to become more like a valued member of the target language community (Gardner & Lambert, 1972), and instrumental motivation, which reflects a determination to acquire another language to achieve such goals as a good jobs or social recognition (Clement, Gardner, & Smythe, 1977).

As for the effect of motivation on language learning, students with motivational orientation involving goals of mastery, learning, and challenge, as well as beliefs that the task is interesting and important, will engage in more metacognitive activities such as setting goals of mastery, self-management, planning, and monitoring (Meece, Blumenfeild, & Hoyle, 1988; Paris & Oka, 1986). Motivation also facilitates the use of numerous cognitive strategies such as elaboration, organization, rehearsal, and maintaining attention (Pintrich & De Groot, 1990). Furthermore, Samimi and Takahashi (1992) reported that motivation is significantly positively correlated to sociability in language classrooms and attitudes toward a target language.

Many research studies reported a significant effect of motivation on language strategies in general. However, Oxford and Nyikos (1989) pointed out the bi-directional aspects of motivation and language strategy use. They assumed that high level motivation leads to a variety of strategy use. On the other hand, it may also be true that high strategy use results in a high degree of motivation.

Career orientation.

Politzer and McGroarty (1985) conducted a study on the relationship between school major and language learning strategy choice among college students in the U.S. They found that the students majoring in social science and humanities employed more strategies than the students majoring in science and engineering. Based on this study's results, Politzer and McGroarty (1985) suggested that career orientation or school major affects students' choice of learning strategies. Oxford and Nyikos (1989) conducted a study to investigate the differences in language learning strategies used among college students with different majors. They divided the students into three groups based on their majors: (a) technical (including engineering, computer science, and physical science); (b) social science, education and humanities; and (c) business and other majors. They found that students majoring in humanities, education, and social science used significantly more strategies than the other two groups of students. Students majoring in humanities, education, and social sciences, especially demonstrated greater use of communicative strategies that require extracurricular effort.

Self-ratings of proficiency.

Several studies reported a positive correlation between self-ratings of language proficiency and language strategy use. Oxford and Nyikos (1989), in their study of language learning strategies of 1200 college students, found that self-ratings of language proficiency level, have a significant relationship to language strategy use. Chang (1991) conducted a study with 50 Chinese speaking ESL students at a University in the Southeastern region of the US. The study shows that students who rated their proficiency

higher than average used more strategies than students who rated their proficiency average and below average. Watanabe (1990) also reported a moderate correlation of $r = .30$ ($p < .0005-.001$) with Japanese university EFL students. These results might explain the tendency that the higher the learners rate their language proficiency, the more language strategies they employ.

Other variables influencing language strategy choice.

Oxford and Nyikos (1989) state that students who studied foreign languages for four to five years use considerably more strategies than students who studied them for fewer years.

Language Learning Strategies

Learning Styles

Learning styles have been defined as “cognitive, affective, and physiological traits that are relatively stable indicators of how learners perceive, interact with, and respond to the learning environment” (Keef, 1979, p. 4). Scarella (1990) describes them as “cognitive and interactional patterns which affect the ways in which students perceive, remember, and think” (p.114). Learning styles are also referred as “stable and pervasive characteristics of an individual, expressed through the interaction of one’s behaviors and personality as one approaches a learning task”(Garger & Guild, 1984, p. 11). It is understood that there is a broad range of definitions in learning styles available because they preclude individual learner’s perception, cognition, conceptualization, affect, and behavior (Kincella, 1995). Dunn, Gemake, Jalali, & Zenhausern (1991) argue that at least 21 different learning styles have been identified and most individual learners may

use between six and 14 learning styles. Among them Oxford and Anderson (1995) itemized eight sets of opposite styles--since learning style is bipolar, ranging from one extreme to another, as principle learning styles for second and foreign language learning.

The following are the dichotomies for the major learning styles categorized by Oxford and Anderson (1995): (a) *global* and *analytic* (referring to cognitive styles). The global learner begins with the whole picture, whereas the analytic learner begins with separate parts and pieces them together to make a whole (Oxford & Anderson, 1995, p 204). This *global-analytic* dichotomy is sometimes synonymous with right-brain and left-brain dominance. A right-brain dominant or a global language learner, tends to view things as a whole and has trouble with discerning important details from the whole. A left-brain dominant person, on the other hand, tends to see things analytically and is good at separating important pieces of information from the whole. In terms of language learning, a global person might prefer learning languages through actual communication and an analytic person is likely to prefer learning in a formal academic setting (Ellis, 1989); (b) *field dependent* and *field independent* (referring to cognitive styles). According to Reid (1995), field independent learners rely on their own judgement and work and solve problem independently. They are task oriented. Field dependent learners, on the other hand, depend on authority figures for judgements and rely on others' opinions before they judge. They prefer work with others and are socially oriented. With reference to the acquisition of grammar, Abraham (1985) pointed out that a *field-independent* learner, tends to be analytic and rule-oriented whereas a *field dependent* learner is likely to be global and non-analytic; (c) *feeling* and *thinking* (referring to both

affective and cognitive style); a *feeling-oriented* learner tends to make a decision based on emotion and his/her decisions might be swayed by the surrounding atmosphere. In contrast, a thinking-oriented person is likely to make decisions relying on data available and his/her logic and analysis of the data; (d) *impulsive* and *reflective* (referring to both affective and cognitive styles). This dichotomy refers to a learner's impulsivity and reflectivity. An impulsive learner is more global whereas a reflective learner is more analytic. Another classification can be that impulsive learners are quick but inaccurate and reflective learners slow but accurate; (e) *intuitive-random* and *concrete-sequential* (referring both to cognitive and executive styles). An *intuitive-random* learner is an abstract, holistic and non-linear thinker. A concrete-sequential learner, in contrast, has an analytical, logical, organized and sequential learning styles; (f) *Judging* and *perceiving* (referring both to cognitive and executive styles). *Judging learners* plan and organize their study and are on time for class. However, they do not prefer ambiguity and tend to make a hasty decision, whereas, *perceiving* learners are not as rigorous with planning, organizing, nor as punctual as *judging* learners. They tend to tolerate a great deal of ambiguity and avoid drawing hasty conclusions; (g) *extroverted* and *introverted* (referring both to social and affective styles). An extroverted learner might be able to learn most by interactive activities such as engaging in conversations and group activities. An introverted learner, however, might do his/her best working alone or with a few people he/she knows very well; (h) *visual*, *auditory* and *hands-on* (referring to learning preferences through different sensory). A visual-oriented learner prefers to gain information through a great deal of visual stimuli, whereas an auditory learner learn well

by listening attentively without visual support. A hands-on learner prefers to learn through physical movements with actual objects, such as role-play and games with toys.

Language Learning Strategies

Learning strategies are used to “affect the learner’s motivational or affective state, or the way in which the learner selects, acquires, organizes, or integrates new knowledge” (Weinstein & Mayer, 1986, p.315). In comparison to learning styles, learning strategies are more specific. Rigney states (1978) that strategies are the specific behaviors used more or less intentionally by learners in order to enhance comprehension, storage, retrieval, and optimal use of information.

Classification and identification of language learning strategies has been attempted by researchers (Naiman et al., 1978; O’Malley & Chamot, 1990; Oxford, 1990). However, Oxford (1990) argues that to date, any existing classification for language learning strategies is in its infancy and needs to be examined through practical observations. Oxford further states that:

there is no complete agreement on exactly what strategies are; how many strategies exists; how they should be defined, demarcated, and categorized; and whether it is, or ever will be, possible to create a real, scientifically validated hierarchy of strategies. (p.17)

Rubin (1975) classified language learning strategies based on language classroom observation and by students' self-reporting. Rubin suggests two primary groupings of language learning strategies. The first relates to strategies directly affecting learning such as monitoring, guessing, inductive reasoning, deductive reasoning, clarification and

verification, practice, and memorization. The second grouping subsumes strategies that indirectly affect learning, including creating practice opportunities and using most of the communication strategies such as looking for a native speaker for conversation.

O'Malley, Chamot, Stunner-Manzanneres, Kupper, and Russo (1985) argue that learning strategies in general are classified into three principal categories — metacognitive, cognitive, and social affective strategies -- based on the level or type of information processing. Metacognitive strategies are higher order executive skills such as selective attention, planning, monitoring one's comprehension and production, and evaluation of the learning process and outcomes (O'Malley & Chamot, 1990). Cognitive strategies operate directly on incoming information, manipulating it in ways that enhance learning (O'Malley & Chamot, 1990). They include rehearsal, organization or grouping and classifying, summarizing and synthesizing, deduction or applying rules, imagination or using visual images, transfer or using previously known linguistic information, and elaboration. Social affective strategies involve either interaction with other people or ideational control over affect (O'Malley & Chamot, 1990), and they include cooperation, questioning for clarification and verification, rephrasing, elicitation, self-talk, and using mental control.

Typology of Language Learning Strategies

Oxford (1990) offered the most comprehensive and detailed classifications of language learning strategies based on their purposes and usages. According to her, they are divided into two principal categories: direct and indirect strategies. Each principal category is further divided into three subcategories. Direct strategies include three

subcategories: memory, cognitive, and compensation strategies. Indirect strategies involve three other subcategories: metacognitive, affective, and social strategies. Following is a summary of Oxford's typology (1990) for language learning strategies.

Direct strategies.

These strategies require mental processing and directly involve the learning of the target language. Individual strategies involved in direct strategies are further classified as, *memory*, *cognitive*, and *compensation*, according to different types of mental processing and purposes.

As Oxford (1990) mentioned that *memory strategies* are concerned with the effective ways of memorizing vocabularies and expressions which help students store and retrieve information in communication. Individual strategies belong to the strategies which follow: (a) grouping: categorizing language information into meaningful units such as nouns and verbs, and similarity and dissimilarity; (b) associating and elaborating: relating new language information to already existing concepts and creating associations between/among language information; (c) placing new words into contexts: placing newly learned words and expressions into sentences and stories; (d) applying image and sounds: using imagery, key words, semantic mapping, and similar sounds to memorize new language information; (e) reviewing well: careful and structured review of what they have learned and memorized; and (f) employing action: physically acting out newly learned information or using physical sensation and feeling.

In Oxford's view, *cognitive strategies* involve direct manipulation or transformation of the target language and are the most widely used strategies among

language learners (Chamot, O'Malley, Kupper, & Impink-Hernandez, 1987; O'Malley, Chamot, Stuwner-Manzanneres, Kupper, & Russo, 1985). Cognitive strategies are further divided into the following four major subsets of strategies: (a) practicing all four skills of the target language--includes imitation of native accents, pronunciation, gesture both in naturalistic and formal academic context; (b) receiving and sending messages--includes skimming in reading and listening to receive messages quickly and using printing and non-printing materials to understand and produce languages; (c) analyzing and resourcing--includes translating, transferring knowledge of one language to another, analyzing new language information (sounds, vocabulary, rules, expressions) contrastively and deductively; and (d) creating structure for input and output--includes note-taking, summarizing, and highlighting in order to comprehend and produce the target language efficiently.

For Oxford, *compensation strategies* involve the strategies that compensate for the learner's lack of knowledge in the target language. Compensation strategies are further divided into two sub-strategies: (a) using linguistic and non-linguistic cues, and (b) overcoming limitations in speaking and writing--includes switching to the mother tongue, using gestures/mimes and circumlocution/synonyms, controlling topics, coining words, asking for help, and avoiding partial or total communication.

Indirect strategies.

These strategies are termed "indirect" because they do not directly involve learning of the target language. However, they support and regulate the learner's language learning on the basis of his/her cognitive styles, affective traits, and behavioral patterns.

Strategies involved in indirect strategies are further divided into three subsets of strategy group: *metacognitive*, *social*, and *affective* strategies.

As Oxford (1990) mentions, *metacognitive strategies* help coordinate the individual learning process and are further divided into three subsets of strategies: (a) centering one's own learning--includes paying attention to what is learned, over-viewing what is learned, and delaying speech production to focus on listening, (b) arranging and planning one's learning--includes strategies such as finding out about language learning (trying to find out what language learning is to promote the learner's own learning), organizing one's study, setting goals and objectives, identifying the purpose of a language learning task, and seeking and creating practice opportunities.

In Oxford's view (1990), *affective strategies* help learners gain control of the affective side of language learning such as motivation, attitudes, emotions, and values. Naiman, Frohlich, Stern, & Todesco, (1978) explain that affective factors might be one of the most influential aspects in success or failure for language learning. Taking a positive attitude and having a strong sense of goal or motivation will greatly enhance language learning. On the contrary, taking a negative attitude, low motivation, and high anxiety will hinder language learning. Affective strategies are further divided into three groups of strategies, lowering one's anxiety, encourage oneself, and taking one's emotional temperature.

As Oxford, *social strategies* involve the use of language as a form of communication which is an essential part of social behavior. Therefore, using appropriate social strategies in communication may greatly enhance language learning.

Social strategies are further divided into three sets of strategy groups: (a) asking questions (for correction, clarification and verification; (b) cooperating with others (peers and native speakers), and (c)"empathizing with others" (for developing cultural understanding and becoming familiar with other's thoughts and feelings).

Gender Differences in Learning Styles

Many research studies show that females tend to be more field dependent whereas males tend to be more field independent (Cagley, 1983; Oxford & Lavine, 1991; Witkin, Moore, Goodenough & Cox, 1977). Hansen and Stanfield (1981) report that field independent learners, usually males have an advantage in language learning. However, this result might be associated with written test scores that emphasize analytical/logical thinking such as grammar construction (Oxford, 1995). Females, usually field dependent, may have more holistic and global orientations. They, therefore, might prefer learning strategies that require less analytic skills such as many strategies involved in actual communication (Oxford & Lavine, 1991).

Research studies on learning styles also show that females tend to be more reflective than males and males more impulsive (Belenky, Clinchy, Goldberger, & Tarule, 1986). Impulsive learners may often draw a premature conclusion and they may respond too quickly (Oxford, 1995). Reflective learners, on the other hand, may keep themselves from drawing a hasty conclusion. However, too much concern about accuracy and extreme reflection may hinder the development of communicative competence (Oxford, 1995).

Much research has reported that more females tend to be feeling-oriented whereas

more males are likely to be thinking-oriented (Belenky, Clinchy, Goldberge, & Tarule, 1986, Lawrence, 1984; Oxford, 1995). Feeling-oriented learners tend to be emotional, personal, subjective, and empathetic and are good at interpersonal relations. Thinking-oriented learners are likely to be impersonal, factual, and analytic (Lawrence, 1984). Oxford (1995) postulates from the research studies that males may prefer to use the approach which relies on rules, logic, and facts and to avoid interpersonal interactions. Females, in contrast, prefer strategies involved in social interaction which require a strong degree of empathy, intimacy, and emotion. Females are better at using social and cooperative learning styles, whereas males are comfortable using individual and independent learning styles.

Gender Differences in Language Learning Strategies

Individual choice of learning strategies is closely associated with learning styles (Rossi-Li, 1995). Research studies on language strategy involving gender generally show more frequent use by females than males (Ehrman & Oxford, 1989; Green, 1991; Green & Oxford, 1993; Oxford, 1993; Oxford, Nyikos, & Ehrman, 1988; Yang, 1992). As for categorical strategy use, gender differences are the most obvious in the use of socially-based strategies. (Bedell, 1993; Green, 1991; Green & Oxford, 1995; Yang, 1992) For instance, Politzer (1983) reported in his study using college students that female students use social strategies considerably more frequently than male students. Oxford and Nyikos (1989) found that female college students employ conversational input-elicitation strategies more often than males. Ehrman and Oxford (1989) also discovered among adult ESL learners that females use more strategies involving social interactions than do males.

Research studies also have shown greater female strategy use other than socially-based strategies. Oxford, Park-Oh, Ito, and Sumrall (1993) report females' greater use of cognitive, compensation, and affective strategies. Bacon (1992) report that females are superior even in the use of metacognitive and cognitive strategies. Oxford, Lavine, Hollaway, Felkins, & Saleh (1996) discover greater female use of cognitive and metacognitive strategies. Bedell (1983) also discovered among college students learning English in China that female students used memory and metacognitive strategies significantly more often than did male students. Green and Oxford (1995) studied learner strategies of Puerto Rican ESL/EFL students. They reported that female students used memory and metacognitive strategies more often than did males.

On the other hand, males sporadically reported more frequent use of strategies. Bedell (1993) reports greater use of affective strategies by males. Bacon and Finemann (1990) discovered more frequent use of decoding and analytic strategies by males learning Spanish. Interestingly, Brecht, Davidson, & Ginsburg, (1990) found greater use of social and affective strategies by male college students learning Russian. However, in most cases, males have reported superior use of individual strategies but not of a categorical use of strategies (Bedell, 1993; Green & Oxford, 1993).

Cultural Differences and Learning Styles

Although culture is not a unique factor for determining individual learning style, it is quite likely that individual learners' cultural backgrounds have a significant influence on their learning styles (Brown, Collins & Duguid, 1989; Nelson, 1995; Oxford, Hollaway, & Muriello, 1992). Nelson (1995) argues that "individuals are most likely not

born with a genetic predisposition to learn analytically or relationally, visually or kinesthetically. They learn how to learn through the socialization processes that occurs in families and friendship groups” (p. 6). Merriam and Caffarella (1991) further claim that to understand individual learning strategies, “one must consider the impact of the family, the educational system, and the culture on what we know and how we come to know it” (p. 178). In fact, these claims have been supported by many research studies. Dunn, Gamale, Jalali and Zanhausern (1990) found among school children that one’s learning style preference is significantly influenced by his/her cultural background. Similar findings have been reported by Ramirez and Price-Williams (1974). They found that Mexican American children perform cognitive tasks differently from Anglo-American counter parts.

Comparing Learning Styles Between Asian and Latino Students

According to Oxford, Holloway, & Murillo, (1992), Latino students often develop global learning styles. They prefer to use such strategies as guessing from context, working with others rather than by themselves, making judgements based on personal relationships rather than relying on the logic of their thoughts, and avoiding details. In contrast, Chinese and Japanese students are analytic and detail oriented (Oxford & Burry-Stock, 1995). In a similar vein, much research on *field dependence/independence* reports that Latino students tend to be *field-dependent* (Claxton & Murrell, 1987; Ramirez & Castaneda, 1974; Ramirez & Price-Williams, 1974; Violand-Sanchez, 1995). Studies on Asians, however, are contradictory. Japanese and Chinese students have been reported to be either *field dependent* (Nelson, 1995) or *field independent* (Bean, 1990).

Research studies on learning styles reported that Latino students tend to be *feeling-oriented* (Oxford, Hollaway and Muriello, 1992), *impulsive and perceiving* (Oxford & Lavine, 1992). On the contrary, Asian students (Japanese) are more likely *thinking-oriented* (Oxford, Hollaway & Murillo, 1992), *reflective* (Nelson, 1995; Oxford, Hollaway & Murillo, 1992;), *concrete-sequential* (Chinese, Taiwanese, and Japanese) (Oxford & Burry-Stock, 1995).

Oxford and Anderson (1995) state that Latino students are greatly *extroverted* and prefer hands-on to visual or auditory learning styles. They prefer cooperative learning with a great amount of physical activities. Asian (Korean, Chinese, and Japanese) students, in contrast, are highly *introverted* and are more visual than auditory or hands-on oriented. They are quite reserved in classrooms and avoid displaying emotion and overly exaggerated gestures.

Language Learning Strategies Used by Effective Learners

Second language research on learner strategy identification has strongly imply that successful language learners use a wider range of strategies and they use them more often than unsuccessful learners (Green & Oxford, 1995; Reiss, 1981; Rubin, 1975; Trayer, 1991).

Rubin (1975) described the strategies employed by good language learners. According to Rubin, effective language learners are willing and accurate guessers. Specifically, they have the ability to make valid, rational, and reasonable inferences. Effective language learners have a strong desire for communication. In order to get their meaning across, they may employ such strategies as circumlocution, paraphrasing

utterances, using gestures and eye contact. When they communicate, they look for patterns and forms of a language. They analyze the patterns, classify and synthesize the language information. They constantly attempt to differentiate relevant from irrelevant clues. They also look for opportunities to communicate with native speakers, classmates, and teachers, and are willing to initiate conversation.

Effective language learners monitor their own and others' speech. In other words, they constantly pay attention to how correctly their intention is received by others. Effective language learners pay attention to meaning. They know that paying attention to individual vocabulary, grammar, and to surface structure of speech is never sufficient to grasp the real intended meaning. Therefore, they constantly pay attention to the context in which the utterances are exchanged, to the relationship of participants and their mood, and to the rules of conversation. Effective language learners also employ non-verbal cues and word association clues. They are risk-takers, and they have a great amount of tolerance for ambiguity.

Language Learning Strategies Employed by Second and Foreign Language Students

It is assumed that second language learners (SL learners) are more often exposed to target languages and have a better chance to develop communicative skills and also have a stronger desire and need to develop their proficiency than foreign language learners (FL learners) who generally study languages only in schools to fulfill their language requirement. Considering these differences, it can be presumed that SL students have better opportunities and an immediate necessity to develop strategies to fit in the target language environment.

This assumption is largely supported by comparing the frequency of using the strategies by SL and FL students. Oxford (1992) studied the past data (Green, 1991; Oxford, 1986; Oxford & Niykos 1989; Oxford, Talbott, & Halleck 1990; Phillips, 1991; Watanabe, 1990) and calculated the percentage of high, middle, and low frequency users. The study shows that 68% of the SL learners fall into high frequency users, 38% medium frequency users, and none of them are low frequency users. However, among the FL learners, 15% of the learners are high frequency users, 72% medium frequency users, and that the remaining 13% are low frequency users. These differences prove that being in a target language environment and experiencing an immediate necessity for communication are associated with more frequent use of language learning strategies.

O'Malley, Chamot, Stewner-Manzanares, Kuppar, & Russo (1985) investigated 17 Spanish-speaking high school age students' learning strategies enrolled in beginning and intermediate level ESL classes. A total of 638 strategies were identified with an average of 33.7 strategies per student with a beginning level students use more strategies. They found that cognitive strategies were employed almost twice as often as metacognitive strategies. The social and affective strategies were used relatively less frequently compared to the other two strategies.

Learning strategies used by FL students were investigated by Chamot and O'Malley, (1987) and Chamot, O'Malley, Kupper, and Impink-Hernandez, (1987). The subjects were high school students learning Spanish and college students learning Russian with different levels of proficiency. Beginning level Spanish students reported the use of an average of 12.4 strategies. In contrast, intermediate and advanced Spanish

students reported using an average of 16.9 strategies. In Russian, beginning level students reported the use of an average of 26.9 strategies and intermediate and advanced level students reported the use of an average of 30 strategies. These results contrast sharply with the ESL study conducted by O'Malley et al. (1985) in which beginning level students reported more strategy use than did intermediate students.

As for strategy use, these FL studies also reported more frequent use of cognitive than metacognitive strategies. However, they reported much less frequent use of social and affective than of cognitive and metacognitive strategies. Using social and affective strategies accounted for only one percent of total strategies identified.

Overall findings of these ESL and FL studies were similar in that both ESL and FL students use a similar types of strategies with ESL students using more strategies on average. However, the FL group reported far less use of affective strategies than the other two strategies. As was previously mentioned, ESL students do employ social and affective strategies more often than FL counter parts out of both immediate need and a strong desire for communication.

Summary

The articles and books cited in this review provide insights into biological, social, and psychological gender differences in language acquisition and its usage. Many research studies in psychological literature imply subtle but consistent gender differences in language acquisition. Sociological literature also prefers arguing the existence of gender differences in the use of language. Considering these psychological findings, implications and sociological arguments in gender differences, possible psychological and

sociological influences on language learning styles and strategy use by males and females were attempted.

This literature review also provides possible variables which may have an influence on the use of language learning strategies and on gender and culture. In addition, this review provides Oxford's (1990) typology for language learning strategies with brief introductions to several other categorizations in language learning strategies. Learning styles are closely associated with learning strategies. Therefore, learning styles and learning strategies are discussed in terms of gender and cultural differences. Language learning strategies used by effective learners and by EFL and ESL learners are also briefly discussed in this chapter.

In Chapter III, the investigator will discuss the methodology of this research study which includes subjects, instruments, procedure, data collection, data analysis, and the null hypotheses.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study is to investigate the differences between females and males, and Latino and Asian ESL students in the use of language learning strategies. Also variables influencing the learners' strategy use were investigated. This study involves an analysis of data gathered from a questionnaire completed by 147 volunteer Latino and Asian ESL students in five large to mid-size universities in the Southeastern region of the United States. The self-report questionnaire on language learning strategies, which was entitled "Strategy Inventory for Language Learning," was adopted as a primary research instrument for this study.

Chapter I introduced the study, and Chapter II provided a review of the literature related to gender differences in biological, social, and psychological aspects of language acquisition, learning, and usage. Typology of language learning strategies and variables affecting one's choice of language strategies in relation to gender and culture were also discussed in the chapter. The purpose of Chapter III is to present the methodology used in this study. In this chapter, the information will be presented in the following order: subjects, instruments, data collection, data analysis, and null hypotheses.

Subjects

The 147 subjects for this research study were drawn from a potential total grand population of 580. Factors including availability of class time in which to administer the instrument and willingness of classroom ESL instructors to allow their students to

participate in the study reduced the potential population to 154 subjects. Out of the 154, subjects, 147 completed the research questionnaire. Seven incomplete questionnaires were discarded.

The subjects for this research study were foreign students enrolled in an English as a second language program at the following five universities located in the southeastern region of the United States: (a) the American Language Program (ALP) at the University of Georgia; (b) the English Language Institute (ELI) at the University of Alabama, Tuscaloosa; (c) the Intensive English Program (IEP) at Georgia Southern University; (d) English as a Second Language Program (ESL) at Kennesaw State University; and (e) Language Institute-Intensive English Program (IEP) at Georgia Institute of Technology. Out of 147 participants, 55.1 % (81 participants) were females. The remaining 44.9 % (66 participants) were males. In nationality, 49 % (72 participants) were Asian and the remaining 51% (75 participants) were Latino.

The breakdown of the participants was as follows: 34 at the University of Georgia; 27 at the University of Alabama at Tuscaloosa; 17 at Georgia Southern University; 26 at Kennesaw State University; and 43 at Georgia Institute of Technology. The researcher visited ESL classrooms of the six universities with permission from the directors and instructors. The researcher asked students to participate voluntarily in the research questionnaire in each classroom visited and the questionnaire was handed out by the researcher to the individual volunteer students. There was no random sampling.

Tables 1,2,3,4,5, and 6 illustrate the subjects' profiles according to their nationalities, genders, cultural backgrounds, gender and cultural backgrounds, age, and

Table 1

Subject Profile According to Their Nationalities

Nationalities	Numbers
Asia	
China	4
Japan	29
Hong Kong	2
Korea	26
Malaysia	1
Taiwan	5
Thai	5
Subtotal	(72)
Latino	
Argentina	1
Brazil	6
Bolivia	3
Chili	1
Colombia	28
Ecuador	1
Guatemala	2
Mexico	4
Nicaragua	1
Spain	2
Panama	3
Peru	1
Puerto Rico	1
Venezuela	21
Subtotal	(75)
Total	147

Table 2

Subject Profile According to Gender

Gender	Number
Female	81
Male	66
Total	147

Table 3

Subject Profile According to Nationality

Students Percentage	N	Percentage	Cumulative
Latino	75	51.0	51.0
Asian	72	49.0	100.0
Total	147	100.0	100.0

Table 4

Subject Profile According to Gender and Nationality

Gender x Nationality Percentage	N	Percentage	Cumulative
Latino female	44	29.9	29.9
Latino male	31	21.1	51.0
Asian female	37	25.2	76.2
Asian male	35	23.8	100.0
Total	147	100.0	100.0

Table 5

Subject Profile According to Age

Age Percentage	N	Percentage	Cumulative
15-24	77	52.4	52.4
25-34	62	42.1	94.5
35-44	6	4.1	98.6
45-54	2	1.4	100.0
Total	147	100.0	100.0

Table 6

Subject Profile According to School Major

Major Percentage	N	Percentage	Cum.
Social science /education/ humanities	23	15.6	15.6
Business administration/ Law	45	30.6	46.2
Engineering/ Computer science / Physical and Health science	47	32.0	78.2
Undecided	32	21.8	100.0
Total	147	100.0	100.0

school majors.

Instrument

The instrument (Appendix J & K) used in this investigative study has two parts. Part I, developed by the current researcher, consists of background and demographic information of the subjects and will identify the following information: (1) the last four digits of the social security number; (2) age; (3) gender; (4) cultural background; (5) level of motivation; (6) length of time studying English; (7) self-rating of English proficiency; (8) type of motivation to study English; (9) length of stay in the United States; (10) major; (11) native country; (12) native language; and (13) other languages spoken. There are five open-ended and eight close-ended questions in Part I.

Part II consists of the self-reported questionnaire, Strategy Inventory for Language Learning (SILL developed by Oxford, 1986). Permission was granted by the instrument's author, (Oxford, 1986) to use the SILL as the major instrument in this study (Appendix C).

The SILL is "a Likert-scaled, self-reported questionnaire that assesses the frequency with which the respondent uses a variety of different techniques for second or foreign language learning" (Ehrman & Oxford, 1989, p. 2). The SILL was first designed by Oxford (1986) in order to measure the frequency of the use of language learning strategies used by the students at the Monterey Defense Language Institute in California. Later, the SILL was developed into two revised versions. One is for English language learners of foreign languages, which consists of 80 questions. The other is for non-native speakers of English learning the language as a second or foreign language, which consists of 50 questions. In this research, the "Version for Speakers of Other Languages Learning

English” is used (SILL for ESL/EFL). In order for ESL students who have difficulty in comprehending question on the SILL questionnaire, Chinese, Japanese, Korean, Portugese, and Spanish versions of the SILL were administered upon request from them.

Oxford and Burry-Stock (1993) estimate that the SILL for ESL/EFL has been . conducted 40-50 times and that 8,000-9,000 language learners have been involved in a study using it since it was developed. Oxford (1995) further claims that the SILL is the only the instrument that has been widely tested for its reliability and validity for the last 15 years.

Fifty questions in the SILL are grouped into six sub-scales and were initially developed on the basis of the results from factor analysis, a statistical procedure. These six sub-scales have been developed so that each question in the individual sub-scale would promote better understanding and in-depth research of learner strategies in language learning (Oxford, 1995). The following is a summary of the six sub-scales of the SILL questionnaires developed by Oxford (1990):

1. *Memory strategy*, including grouping, imaginary, and association strategies (nine questions).
2. *Cognitive strategies*, including analyzing, inferencing, summarizing, and reasoning (14 questions).
3. *Compensation strategies*, including gestures, mimes, and guessing from context in order to compensate limited knowledge in a target language (six questions).
4. *Metacognitive strategies*, including planning, arranging, and evaluating one’s learning, setting goals, and paying attention (nine questions).

5. *Affective strategies*, including lowering anxiety, promoting motivation, and self-encouragement (six questions).
6. *Social strategies*, including interacting with native speakers, asking questions, and empathizing with others (nine questions).

The SILL consists of a packet which includes a sample question, a scoring sheet on which students can calculate average scores on each sub-scales of their strategy use, and a graph showing the results of a learner's strategy use, in addition to the questionnaire (50 questions).

The SILL asks language learners to report the frequency with which they use certain language learning strategies. Typical questions in the questionnaire ask the subjects to report the frequencies of using a given learning strategy on a five-point Likert-type scale ranging from (a) never true for me; (b) usually not true for me; (c) somewhat true for me; (d) usually true for me; (e) always true for me. These response options were based upon well-accepted response options on the Learning and Study Strategies Inventory designed by Weinstein, Palmer, and Schulte (1987).

Typical items in the questionnaire ask about the respondents' behaviors such as "seeking native speakers for conversation," "listening to foreign broadcasting," and "evaluating one's own progress in learning a target language." The subjects are asked to respond to each question in terms of the language they are learning. The SILL is now translated into nine different languages, Arabic, Chinese, German, Japanese, Korean, Russian, Spanish, Thai, and Ukrainian.

Psychometric Quality of the SILL(ESL/EFL version)

Reliability.

Reliability refers to the “degree to which a test consistently measures whatever it measures” (Gay, 1987, p.549). Generally, high reliability for the translated versions of this instrument using Cronbach alpha, a statistical measurement of internal consistency, has been reported when administered to non-native speakers of English: (a) $r = .94$ with a sample of 590 Taiwanese University students using the Chinese translation version was reported by Yang (1992); (b) $r = .92$ with 255 Japanese university EFL students using the Japanese version was reported by Watanabe (1990); (c) $r = .91$ with 59 Korean University EFL students using the Korean version was reported by Oh (1992); and (d) $r = .93$ with 332 Korean university EFL learners using the researcher-revised Korean version was reported by Park (1994). Slightly lower but still high reliabilities of the SILL (English version) when it is administered to the heterogeneous groups of non-native speakers of English, have also been reported : (a) $r = .87$ with 141 students was reported by Phillips (1991); (b) $r = .86$ with 159 students was reported by Oxford, Nyikos, Lezhnev, Eyring, and Rossi-Le (1989); (c) $r = .91$ with 95 students was reported by Anderson (1993).

Validity.

Validity refers to “the degree to which a test measures what it is supposed to measure” (Gay, 1987, p. 128). Since validity can be measured only in terms of the purpose of a study, there are different types of validity: content, *construct*, *concurrent*, and *predictive*.

Content validity refers to “the degree to which a test measures an intended content area”(Gay, 1987, p. 542). *The concurrent* and *predictive* validity of the SILL can be measured in terms of the relationship between the SILL and language performance. Numerous research studies show a mild relationship between them. Oxford, Park-Oh, Ito & Sumrall (1993) reported that learning strategy use was a significant predictor for language achievement for Japanese ($r=.20$, $p<.04$).

The Construct validity is “the degree to which a test measures an intended hypothetical construct, or non observable traits, which explains behavior” (Gay, 1987. p.543). The construct validity of the SILL has also been reported by various researchers. Watanabe (1990) reported a moderate correlation coefficient at $r = .30$ ($p<.0005-.001$) between the SILL and self-ratings of language proficiency among college EFL students in Japan. This result implies that the higher the learner’s rate of language proficiency, the more strategies the learner uses. Park (1994) also reported a moderate correlation of $r = .34$ ($p<.0001$) between scores of Test of English as a Foreign Languages (TOEFL) and the SILL scores among 332 Korean EFL students. Mullin (1992) reported a moderate correlation at $r = .38$ ($p< 0001$) and also at $r = .32$ ($p<.006$) between compensation strategies in SILL and English placement scores and also language course grades respectively among 110 Thai University EFL students. Mullin, however, reported a negative correlation at $r = -.32$ ($p<.006$) between affective strategy use on the SILL and language scores on the entrance examination.

Procedures

In the Fall of 1997, the researcher sent letters to directors of ESL programs in middle to large-sized universities in the Southeastern region of the United States and requested permission to conduct a research survey. Subsequently, the following three schools authorized permission to administer the research questionnaire in their programs: (a) the American Language Program (ALP) at the University of Georgia; (b) the English Language Institute (ELI) at the University of Alabama, Tuscaloosa; (c) the Intensive English Program (IEP) at Georgia Southern University; . With the letters of permission from these three schools, permission was then granted from The University of Tennessee's Human Subject committee on June 3rd, 1998. Later in the Fall of 1998, the researcher searched for schools in the same region as a potential survey sites in order to obtain additional participation in the research studies. Permission to conduct the research survey was given by: (d) the English as a Second Language Program (ESL) at Kennesaw State University; and (e) the Language Institute-Intensive English Program (IEP) at Georgia Institute of Technology. With the letters of permission from these two schools, additional survey sites for this research study was granted from The University of Tennessee's Human Subject committee on October 28, 1998.

Data Collection

The data collection for this study was conducted at the University of Georgia, University of Alabama, Tuscaloosa, and Georgia Southern University in the summer of 1998. Additional data were collected in the Fall of 1998 at the University of Georgia, Georgia Southern University, Kennesaw State University, and Georgia Institute of

Technology. The number of male and female students was approximately equal in each cultural group. The subjects were selected entirely on a voluntary basis.

The questionnaire was handed by the researcher to each individual participant in all five institutions. At the University of Georgia, the questionnaire was filled out in the regular class period. In other schools, the questionnaire was asked to be filled out outside of the classrooms. The questionnaire was then collected by the researcher at the University of Georgia, the University of Alabama, Georgia Southern University, and Georgia Institute of Technology. However, the questionnaire was collected by ESL instructors at Kennesaw State University. In order to obtain the highest return rate, the researcher revisited to each of the five participating institutions and personally spoke to each group of subject. It was reported that it took approximately 20-50 minutes for the participants to complete the questionnaire.

Data Analysis

Data, as provided by scores on the SILL, were collected mostly by the researcher and partly by ESL instructors and analyzed by the researcher using SPSS and SAS. All analyses were carried out at the $p < 0.05$ level except for the Pearson Correlation used on research question seven ($p < 0.001$).

1. Multivariate of Analysis of Variance (MANOVA) was first performed in order to control for a Type I error. This statistical procedure greatly reduces Type I error (Type I error is the probability that a statistical test shows a significant difference when there is no difference in reality). The more one runs statistical tests, the more one risks resulting in Type I errors. Therefore, for the researcher to control

- the possibility of Type I errors of One way - Analysis of Variance (ANOVA) for the research questions 1 and 3 equal to .05, MANOVA is used as a preliminary statistical procedure. If MANOVA detects significant differences, then results from individual ANOVA will be truly different (research questions 1 and 3).
2. One-way Analysis of Variance was performed to determine a difference in the use of the language learning strategies between genders (research question 1).
 3. Multivariate of Analysis of Variance was performed to determine differences in the use of the six language learning strategies between genders (research question 2).
 4. One Way Analysis of Variance was performed to determine a difference in the use of the language learning strategies between Latino and Asian students (research question 3).
 5. Multivariate of Analysis of Variance was performed to determine differences in the use of the six language learning strategies between Latino and Asian student (research questions 4).
 6. A General Factorial Analysis was performed to determine the differences among Latino Latino females, Latino males, Asian females, and Asian males (research questions 5).
 7. Multivariate of Analysis of Variance was performed to determine differences in the use of the six language learning strategies among Latino females, Latino males, Asian females, and Asian males (research questions 6).
 8. A Pearson Correlation-coefficient was performed to determine the relationships

among the six language learning strategies used by female, male, Latino, Asian, and a whole sample (research question 7).

9. A bivariate correlation was performed to determine the relationship between language learning strategy use and the following six independent variables: (a) motivational strength; (b) motivational type; (c) self-ratings of proficiency level; (d) years of studying English; (e) length of stay in the United States; and (f) the number of languages spoken (research question 8).
10. A One-way Anova Post Hoc Multiple Comparison was performed to detect the differences among school majors with regard to language learning strategy use. (research question 9).
11. A regression was performed to determine which of the following variables: (a) gender; (b) culture; (c) motivational strength; (d) motivational type; (e) self-ratings of proficiency level; (f) years of studying English; (g) length of stay in the United States; and (h) the number of languages spoken, have the greatest influence on the use of language learning strategies (research question 10).

The Null Hypotheses

The null hypotheses that were investigated are as follows:

1. There is no significant difference between female and male ESL students in the use of language learning strategies as a whole.
2. There are no significant differences between female and male ESL students in the use of the following language learning strategies: Memory; cognitive; compensation; metacognitive; affective; and social strategies.

3. There is no significant difference between Asian and Latino ESL students in the use of the language learning strategies as a whole.
4. There are no significant differences between Asian and Latino ESL students in the use of the six language learning strategies: Memory; cognitive; compensation; metacognitive; affective; and social strategies.
5. There is no significant difference among Latino female, Latino male, Asian male, and Asian female in the use of the language learning strategies as a whole.
6. There are no significant differences among Latino female, Latino male, Asian male, and Asian female in the use of the six language learning strategies: Memory; cognitive; compensation; metacognitive; affective; and social strategies.
7. There are no significant relationships among the language learning strategies used by female male, Asian and Latino, and also ESL students as a whole.
8. There are no relationships between language learning strategies and the following seven independent variables: (a) motivational strength; (b) motivational types, (c)self-ratings of proficiency level; (d) years of studying English; (e) length of stay in the United States; and (f) the number of languages spoken.
9. There is no relationship between language learning strategies and schools major.
10. There are no variables which have significant influence on the use of language learning strategies: (a) gender; (b) cultural back ground; (c) motivational strength; (d) years of studying English; (e)self-ratings of proficiency level; (f) motivational types; (g) length of stay in the United States; and (h) the number of languages spoken.

This chapter presented the methodology which includes subjects, instrument, procedure, data collection, data analysis, and the null hypotheses. Chapter IV will present analysis of the data.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

This chapter presents the results taken from statistical analyses of the data collected from 147 subjects, following the procedures described in Chapter Three.

The purpose of this study was to examine gender and cultural differences in the use of language learning strategies and relationships among the learning strategies. This study also sought to determine what variables influence learners' use of language learning strategies and the relationships between the variables and the learning strategies. Presentation of the analysis of the data is directly related to the 10 research questions and the ten null hypotheses which will be discussed in this chapter.

Description of the Results

One-way Analysis of Variance was performed to answer research questions one and three, which investigated the differences in the use of language learning strategies between genders and also between Latino and Asian students. A Multivariate of Analysis of Variance was performed to answer questions two, four, and six, which investigated the differences in the use of the six language learning strategies between genders, between Latino and Asian students, and also among Latino females, Latino males, Asian females, and Asian males. General Factorial Analysis was performed to answer the research question five, which determined the differences in the use of language learning strategies among Latino females, Latino males, Asian females, and Asian males.

A Pearson Correlation-coefficient was performed to answer research question

seven, which investigated the relationships among the strategies employed by males, females, Latino, Asian, and a whole sample. A Bivariate correlation was performed to answer research question eight, which sought to determine the relationship between language learning strategies and the six independent variables. A One-way ANOVA Post Hoc Multiple Comparison was performed to answer research question nine, which investigated the differences among school majors with regard to the strategy used. Finally, a regression was performed to answer research question ten, which investigated what variables have the greatest influence on the use of language learning strategies. The findings are presented in frequencies and percentages.

This chapter presents data and data analysis sequentially for each of the ten research questions. At the end of this chapter, an overview of relationships between the data and research questions is presented.

General Description and Item Frequencies

Table 7 summarizes the mean scores on 50 individual questions reported by the participants. One asterisk on the upper right side of each mean score means low usage (>2.49), two asterisks medium usage (2.5 -3.49), and three asterisks high usage (<3.5). Table 8 represents mean scores for the six categorical strategies and an overall mean score. Figure 1 is a graphic representation for Table 8.

The over all mean score for the SILL questionnaire is 3.47 which is quite high in comparison to that of FL learners; this is also a characteristic of ESL learners. This study shows that 60 students (40.8%) fall into high frequency users of language learning strategies, 86 students (58.5 %) medium frequency users, and one student (6%) is a low

Table 7

Mean Scores for Individual SILL Questions Reported by the Subjects.

Item	Descriptions	<u>M</u>	<u>SD</u>
(A1-A9 Memory Strategies)			
A1	Relate what I already know and new things	3.69***	.99
A3	Connect the sound and image of a new word	3.50***	1.18
A5	Use rhymes to remember new words	2.59**	1.28
A6	Use flash cards to remember a new word	2.37*	1.28
A7	Physically act out a new word	2.54**	1.25
(B1-B14 Cognitive Strategies)			
B2	Try to talk like a native speaker	3.87***	1.09
B3	Practice the sounds of English	3.68***	1.05
B4	Use a new word differently	3.48**	1.14
B6	Watch movies and TV in English	4.04***	1.07
B9	Skim English passage, then I read it carefully	3.61***	1.02
B11	Find patterns in English	3.33**	1.17
B13	Try not to do word-for-word translation	3.31**	1.33
B14	Summarize what I hear and read in English	2.82**	1.19
(C1-C6 Compensation Strategies)			
C1	Make a guess to understand	3.59***	1.12
C2	Use gestures when I can not find a word	3.80***	1.09
C3	Make up a new word when I can not find a right one	3.21**	1.25
C4	Try to guess meaning without referring to a dictionary	3.33**	1.26
C6	Look for similar words when I do not find exact words	3.99***	1.04
(D1-D9 Metacognitive Strategies)			
D1	Find as many ways to use English as possible	3.66***	1.06
D2	Notice my English mistakes to become better	3.83***	.95
D3	Pay attention when someone speaking English	4.08***	.86
D5	Schedule myself to have enough time to study	3.23**	1.11
D6	Look for people to speak English	3.85***	1.14
D8	Have a clear goal to learn English	3.61***	1.07

Table 7(Continued)

Mean Scores for Individual SILL Questions Reported by the Subjects.

Item descriptions	<u>M</u>	<u>SD</u>
(E1-E6 Affective Strategies)		
E1 Relax myself when I speak English	3.76***	.95
E2 Encourage myself to speak English	3.65***	1.01
E5 Write down my feelings in diary	2.22*	1.28
(F1-F6 Social Strategies)		
F1 Ask to slow down or to say again when I do not understand	4.07***	1.02
F2 Ask a native speaker to correct my English	3.46**	1.15
F3 Practice English with other students	3.75***	1.13
F4 Ask help from a native speaker	3.84***	1.05
F5 Ask questions in English	4.01***	.91
F6 Learn about the culture of a native speaker	3.85***	1.06

* = > 2.49 (low frequency use)

**= between 2.5 and 3.49 (medium frequency use)

***= >3.5 (high frequency use)

Table 8

Mean Scores for Six Language Learning Strategies Reported by the ESL Students

Strategies	<u>N</u>	<u>M</u>	<u>SD</u>
Memory Strategies	147	3.13	.6844
Cognitive Strategies	147	3.45	.5463
Compensation Strategies	147	3.57	.6321
Metacognitive Strategies	147	3.71	.6721
Affective Strategies	147	3.18	.5713
Social Strategies	147	3.84	.7140
Total	147	3.47	.4342

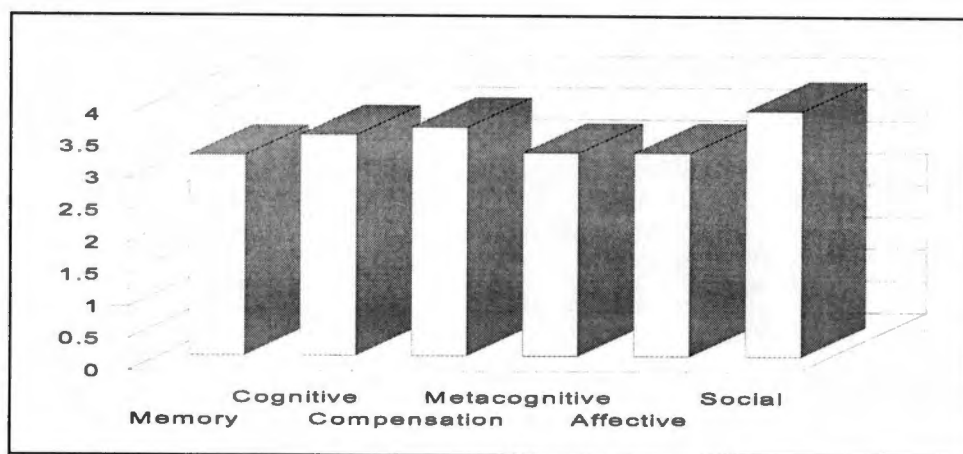


Figure 1

Mean Scores of the Six Language Learning Strategies Reported by the Whole Sample

frequency user in comparison to average frequencies of FL learners' use of language learning strategies, 15%, 72%, and 13% respectively (Oxford, 1992).

The most frequently used strategies by the ESL learners are social strategies with an average of 3.84; metacognitive and compensation strategies follow with an average of 3.71 and 3.57, respectively. Using cognitive strategies is less common than metacognitive strategies with an average of 3.45. Memory strategies, which are also a part of cognitive strategies, are reported to be the least popular of all strategies with an average of 3.13. Affective strategies are also found to be less popular with an average of 3.18.

As for individual strategies, the most frequently used strategies by ESL learners are: "paying attention to someone speaking English" in D3 with a mean score of 4.08; "asking to slow down or to repeat" in F1 with an average of 4.07; "watching English movies and TV" in B6 with a mean of 4.04; and "asking questions in English" in F5 with an average of 4.01. It should be noted that most of these strategies are interactive strategies involving actual communication (Table 7).

As for memory strategies, only two strategies, "relating what one already knows and new things" in A1 and "connecting the sound and image of a new word" in A3 are reported as being highly used. "Using flash cards" in A6, "physically acting out a new word" in A7, and "using rhymes to remember new words" in A5 are found to be less popular strategies (Table 7).

Among cognitive strategies, "watching English movies and TV" in B6 is reported to be by far the most popular strategy. Also, strategies such as "talking like a native speaker" in B2, "practicing English pronunciation" in B3, "skimming first and then

reading English carefully” in B9, “reciting and writing new words” in B1 are found to be popular strategies. “Using new words differently” in B4, “writing notes and letters in English” in B8, “finding patterns in English” in B11, and “trying not to do verbatim translations” in B13 are reported to be relatively popular strategies. “Making a summary in English” in B14 was discovered to be the least popular cognitive strategy used by ESL learners (Table 7).

As for compensation strategies, three out of six strategies are reported to be frequently employed by the ESL learners in this research study. These strategies are: “looking for similar words when one does not find exact words” in C6; “using gestures” in C2; and “Making guess” in C1. The strategies such as “making up new words” in C3, “guessing meaning without a dictionary “ in C4, and “guessing what people will say” in C5 were observed to be of medium frequency of use (Table 7).

In metacognitive strategies, many strategies such as “thinking about progress” in D9, “looking for conversation partners” in D6, “noticing mistakes to become a better learner” in D2, “finding as many ways to use English as possible” in D1, and “having clear goals” in D8 are fairly popular strategies. “Scheduling oneself for study” in D5 is found to be the least popular metacognitive strategy (Table 7).

Among affective strategies, only two strategies, “relaxing oneself when speaking English,” in E1, and “encouraging oneself to speak English” in E2 are reported to be employed with high frequency. “Writing down one’s feelings in a diary” in E5 is the least popular strategy of all (Table 7).

Social strategies are reported to be the most frequently used strategies by the ESL

learners. Five out of six strategies are employed with high frequencies: “asking the speaker to slow down and to say again” in F1; “asking questions in English” in F5; “learning about the culture of a native speaker” in F6; “asking help from native speakers” in F4; and “practicing English with other students” in F3; “Asking native speakers for correction” in F2 is the least popular social strategy reported (Table 7).

Table 8 illustrates the mean scores of the six language learning strategies reported by the participants. Social strategies are reported to be the most popular strategies among the ESL students. Along with the social strategies, metacognitive and compensation strategies are used with a high frequency. Cognitive, affective, and memory strategies are reported to be employed with a medium frequency. Memory strategies are the least popular of all. Figure 1 is the graphic representation for the Table 8.

Research Question One

What are differences between female and male students in the use of overall language learning strategies ?

Null Hypothesis One

There is no significant differences between female and male ESL students in overall language learning strategy use.

One Way Analysis of Variance was performed to determine if a difference existed between genders in the use of language learning strategies as a whole.

First of all, in order to determine differences in the use of learning strategies between males and females, and also Latino and Asian students, Multivariate of Analysis of Variance (MANOVA) was performed to minimize Type I error for the research

question 1 and 3. As shown in Table 9, the statistical analysis revealed that there are differences between genders and also between Asian and Latino students in the use of the six categories of language learning strategies. However, Manova shows there was no significant interaction between genders and the two ethnic groups.

Table 10 summarized the mean scores reported by male and female subjects. As shown in Table 11, statistical results revealed no significant difference between genders in the use of language learning strategies as a whole.

Research Question Two

What are differences between female and male students in the use of six categories of language learning strategies ?

Null Hypothesis Two

There are no significant differences between female and male ESL students in the use of the six categories of language learning strategies.

Multivariate Analysis of Variance was performed to determine differences in the use of the six categories of strategies between genders.

Table 12 summarizes the mean scores of the six categories of strategies reported by male and female participants and Figure 2 is a graphic representation of Table 12. Table 12 shows females' preferences over males for using the five categories of strategies out of six. Differences are especially great in the use of social and affective strategies. Females also use cognitive strategies more than males, as well as metacognitive strategies and also memory strategies. Males appear to be superior to females only in the use of compensation strategies but the difference is very small.

Table 9

Summary of Multivariate Analysis of Variance for the Effect of Interaction, Gender, Nationality and Gender by Nationality on Language Learning Strategies

Effect	<u>F</u>	<u>P</u>
Gender	2.444	.028
Nationality	3.355	.004
Interaction between Gender and Nationality	9.888	.094

p≤0.5

Table 10

Mean Scores for Overall Strategy Use Reported by Male and Female Subjects.

Gender	<u>N</u>	M	SD
Male	66	3.4103	.4345
Female	81	3.5141	.4309
Total	147	3.4675	.4342

Table 11

Summary of One-way Analysis of Variance for the Effect of Gender on OverallStrategy Use.

Gender	<u>SS</u>	<u>df</u>	<u>F</u>	<u>P</u>
Between Groups	.248	1	1.340	.249
Within Groups	26.794	145		
Total	27.041	146		

p ≤ 0.05

Table 12

Mean Scores of the Strategies Used by Female, Male and Total Sample Population

Strategies	Female			Male		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Memory	3.10	.6212	81	3.15	.7351	66
Cognitive	3.49	.5223	81	3.39	.5742	66
Compensation	3.56	.6332	81	3.59	.6353	66
Metacognitive	3.75	.7168	81	3.67	.6189	66
Affective	3.27	.5932	81	3.06	.5932	66
Social	3.97	.6818	81	3.69	.7279	66
Total	3.59	.4309	81	3.41	.4345	66

p ≤ 0.05

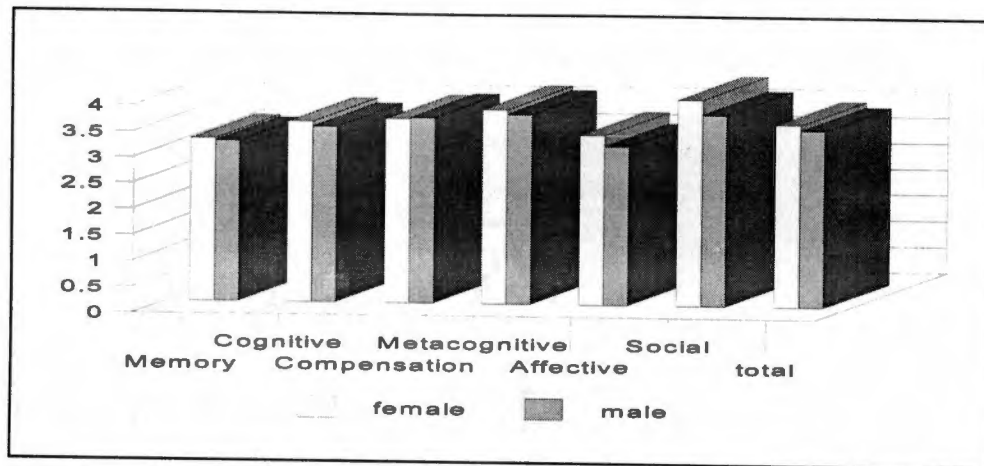


Figure 2

Mean Scores of the Six Language Learning Strategy Use Reported by Female and Male Subjects

The least popular strategies among females are memory strategies. For males, affective strategies are found to be the least popular strategies.

As shown in Table 13, statistical analysis revealed significant differences in affective and social strategies between genders with female reporting more frequent use of strategy. No statistically significant differences were detected between female and male in the use of memory, cognitive, compensation, and metacognitive strategies.

Research Question Three

What are differences between Latino and Asian students in the use of overall language learning strategies ?

Null Hypothesis Three

There is no difference between Latino and Asian ESL students in the use of overall language learning strategies.

Table 13

Summary Multivariate Analysis of Variance for Effect of Gender on the Use of the Six Language Strategies.

Strategies	SS	F	p
Memory	1.152E-02	.028	.867
Cognitive	.227	.762	.384
Compensation	.143	.378	.540
Metacognitive	5.917E-05	.000	.990
Affective	2.312	7.012	.009
Social	2.304	4.413	.004

p≤0.05

One Way Analysis of Variance was performed to determine a difference between gender in the use of overall language learning strategies.

Table 14 illustrates the mean scores reported by Asian and Latino students. Latino students reported to employ more strategies did than their Asian counterparts, with an average of 3.50 and 3.43 respectively. As shown in table 15, statistical results manifested no significant differences between Latino and Asian ESL students in overall strategy use.

Research Question Four

What are differences between Latino and Asian students in the use of the six categorical language learning strategies ?

Table 14

Mean Scores of Overall Strategy Use by Asian and Latino ESL Students

	Asian			Latino			Total		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Mean Scores	3.4322	.3946	72	3.5013	.4692	75	3.4675	.4342	147

Table 15

Summary of One -way Analysis of Variance for the Effect of Nationality on Overall

Strategy Use.

Nationality	<u>SS</u>	<u>df</u>	<u>F</u>	<u>p</u>
Between Groups	.223	1	1.207	.274
Within Groups	26.818	145		
Total	27.041	146		

p≤0.05

Null Hypothesis Four

There are no significant differences between Latino and Asian ESL students in the use of the six categorical language learning strategies.

Multivariate Analysis of Variance was performed to determine differences in the use of the six categorical strategies between Latino and Asian students.

Table 16 illustrates mean scores of the six language learning strategies of Latino and Asian ESL students. Both Latino and Asian students reported using social strategies the most frequent among the other strategies with Latino students using more strategies than Asians. However, Latino students then prefer using metacognitive strategies far more frequency than do Asians. Asian students, on the other hand, reported employing compensation strategies after their use of social strategies. However, the difference between Latinos and Asians in the use of compensation strategies is small.

Cognitive, affective and metacognitive strategies were all reported to be employed with a medium frequency by both Latino and Asian students. Memory strategies are least popular strategies among Latino and affective strategies are found to be least often used by Asian students. Latino students outscored four strategies of the six. Figure 3 is a graphic representation for Table 16. As shown in Table 17, statistical results revealed significant differences between Latino and Asian ESL students in metacognitive and social strategies with greater frequency of use by Latino samples. No statistically significant differences were detected between Latino and Asian students in the use of memory, cognitive, compensation, and affective strategies.

Table 16

Mean Scores for individual Strategy Use Reported by Latino and Asian Sample

Strategies	Asian			Latino			Total		
	M	SD	n	M	SD	n	M	SD	N
Memory	3.17	.7382	72	3.08	.6302	75	3.13	.5463	147
Cognitive	3.42	.5327	72	3.47	.5617	75	3.45	.5463	147
Compensation	3.62	.5293	72	3.52	.7175	75	3.57	.6321	147
Metacognitive	3.58	.6710	72	3.84	.6561	75	3.71	.6736	147
Affective	3.13	.5027	72	3.22	.6304	75	3.18	.5713	147
Social	3.73	.5027	72	3.96	.7938	75	3.84	.7140	147
Total	3.43	.3946	72	3.50	.4692	75	3.47	.4342	147

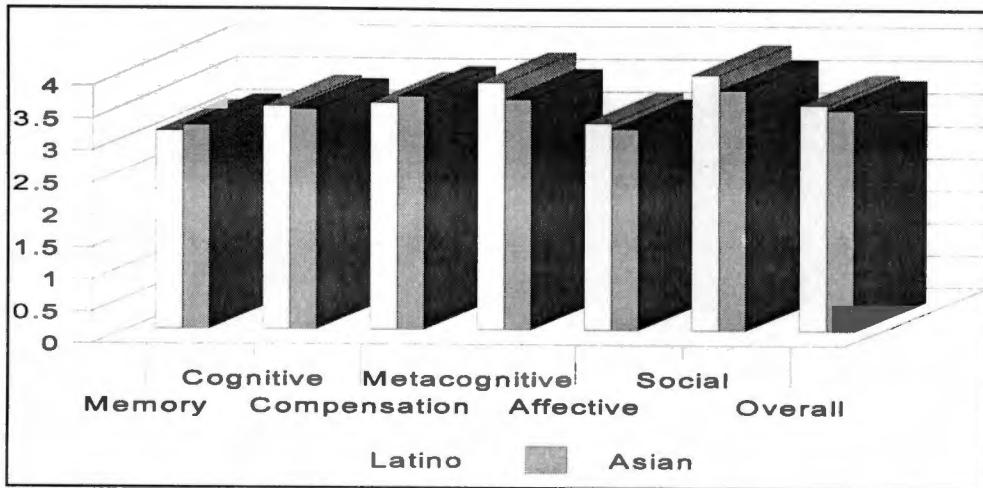


Figure 3

Mean Scores of the Six Language Learning Strategies Used by Latino and Asian Subjects

Table 17

Summary MANOVA of the Effect of Nationality for the Use of the Six Language

Strategies

Strategies	<u>SS</u>	<u>F</u>	<u>p</u>
Memory	.291	.708	.401
Cognitive	4.021E-03	.013	.908
Compensation	.438	1.157	.284
Metacognitive	3.559	9.532	.002
Affective	.218	.661	.417
Social	1.978	4.030	.047

p ≤ 0.05

Research Question Five

What are differences among Latino females, Asian females, Latino males, and Asian males in the use of overall language learning strategies ?

Null Hypothesis Five

There are no significant differences among Latino females, Asian females, Latino males, and Asian males in the use of overall language learning strategies.

General Factorial Analysis was performed to determine the differences among Latino females, Asian females, Latino males, and Asian males with regard to the use of overall language learning strategies. Table 18 illustrates mean scores of overall strategy use reported by Latino females, Asian females, Latino males, and Asian males. Latino females reported the highest average score of 3.57. Asian females reported the next highest average at 3.46. Latino males at 3.41, and Asian males reported the lowest average score of 3.40. As shown in Table 19, statistical analysis demonstrated no significant differences among Asian males, Latino males, Asian females, and Latino Females.

Research Question Six

What are differences among Latino females, Asian females, Latino males, and Asian males in the use of the six categories of language learning strategies ?

Null Hypothesis Six

There are no significant differences among Latino females, Asian females, Latino males, and Asian males in the use of the six categorical language learning strategies.

Multivariate Analysis of Variance was performed to determine the differences among Latino females, Asian females, Latino males, and Asian males with regard to their

Table 18

Mean Scores for Strategies Used by Asian Males, Latino Males, Asian Females, and

Latino Females

Gender x Nation	<u>M</u>	<u>SD</u>	<u>n</u>
Asian males	3.40	.4129	35
Latino males	3.41	.4552	32
Asian females	3.46	.3736	37
Latino females	3.57	.4725	43
Total	3.47	.4342	147

Table 19

Summary of General Factorial Analysis for the Effect of Gender and Cultural Background on the Use of Language Learning Strategies

	<u>SS</u>	<u>F</u>	<u>p</u>
Gender x nationality	.526	.946	.420

$p \leq 0.05$

use of overall language learning strategies. Table 20 compares mean scores of the six language learning strategies as reported by Latino females, Asian females, Latino males, and Asian males. Latino females reported using the learning strategies the most frequent of all the groups. Asian males, on the other hand, reported the use of the strategies with the lowest frequency. The table also shows that females use more strategies than males and also Latino students use them more than their Asian counterparts. In overall scores, the largest difference was detected between Latino females and Asian males.

As shown in Table 21, statistical results revealed no significant differences among Latino females, Asian females, Latino males, and Asian males in the use of the six categories of language learning strategies.

Research Question Seven

What are the relationships among learning strategies used by female and male, Latino and Asian ESL students, and ESL students as a whole.

Null Hypothesis Seven

There are no significant relationships among the language learning strategies with regard to female, male, Latino, Asian, and a whole sample.

A Pearson Correlation was performed to determine the relationships among the six language learning strategies used by female, male, Latino, Asian and a whole sample. As to the female sample shown in Table 22, statistical results revealed that memory and cognitive ($r=.529$), cognitive and metacognitive/affective/social ($r=.548$, $r=.393$, and $r=.432$, respectively) , and metacognitive and social strategies ($r=.412$) were mildly positively correlated at $r = <0.005$. Memory and metacognitive/affective ($r=.437$ and

Table 20

Mean Scores for the Use of Language Learning Strategies Reported by Latino Females,Asian Females, Latino Males, and Asian Males

	Strategies						
	Mem.	Cog.	Com.	Meta.	Aff.	Soc.	Total
<hr/>							
Latino Female							
<u>M</u>	3.13	3.53	3.51	3.88	3.34	4.08	3.56
<u>n</u>	44	44	44	44	44	44	44
<u>SD</u>	.6877	.5533	.7636	.6296	.5790	.7696	.4733
Asian Female							
<u>M</u>	3.17	3.44	3.62	3.59	3.19	3.84	3.46
<u>n</u>	37	37	37	37	37	37	37
<u>SD</u>	.7968	.4865	.4333	.7883	.4819	.5422	.3736
Latino Male							
<u>M</u>	3.02	3.39	3.54	3.78	3.06	3.85	3.42
<u>n</u>	31	31	31	31	31	31	31
<u>SD</u>	.5431	.5839	.6582	.6980	.6730	.8087	.4582
Asian Male							
<u>M</u>	3.18	3.40	3.62	3.57	3.07	3.61	3.40
<u>n</u>	35	35	35	35	35	35	35
<u>SD</u>	.6824	.5839	.6214	.5309	.5227	.6481	.419

Table 21

Summary of MANOVA for the effect of Gender /Nationality on the Use of the Six
Categories of Language Learning Strategies

<u>Strategies</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Memory	.160	.391	.533
Cognitive	5.577E-02	.187	.666
Compensation	3.100E-02	.082	.775
Metacognitive	.417	1.116	.293
Affective	3.891E-02	.118	.732
Social	.104	.212	.646

$p \leq 0.05$

Table 22

Correlations Among the Six Language Learning Strategies Used by Female Samples

Soc.	Mem.	Cog.	Com.	Meta.	Aff.
Memory strategies					
Pearson Correlation					
p (2-tailed)					
<u>n</u>					
Cognitive strategies					
Pearson Correlation	.529**				
p (2-tailed)	<.005				
<u>n</u>	81				
Compensation strategies					
Pearson Correlation	.179	.369*			
p (2-tailed)	.109	.001			
<u>n</u>	81	81			
Metacognitive strategies					
Pearson Correlation	.327*	.548**	.142		
p (2-tailed)	.003	<.005	.207		
<u>n</u>	81	81	81		
.Affective strategies.					
Pearson Correlation	.364*	.393**	.123	.261*	
p (2-tailed)	.001	<.005	.273	.019	
<u>n</u>	81	81	81	81	
.Social strategies					
Pearson Correlation	.180	.432**	.160	.412**	.234*
p (2-tailed)	.107	<.005	.154	<.005	.036
<u>n</u>	81	81	81	81	81

** significant at $p < 0.01$ * significant $p < 0.05$

A Pearson Correlation was performed to determine the relationships among the six language learning strategies used by female, male, Latino, Asian and a whole sample. As to the female sample shown in Table 22, statistical results revealed that memory and cognitive ($r=.529$), cognitive and metacognitive/affective/social ($r=.548$, $r=.393$, and $r=.432$, respectively), and metacognitive and social strategies ($r=.412$) were mildly positively correlated at $p < 0.005$. Memory and metacognitive/affective ($r=.437$ and $r=.261$, respectively), cognitive and compensation, ($r=.369$), and metacognitive and affective ($r=.261$), and affective and social strategies were significantly correlated at $p < .005$. The strongest correlation was found between cognitive and metacognitive at $r = .548$ and also cognitive and memory strategies at $r = .529$.

In the male samples shown in Table 23, memory and cognitive/affective ($r=.491$ and $r=.483$ respectively), cognitive and metacognitive/social ($r=.611$ and $r=.473$), and metacognitive and social strategies ($r=.691$) were shown to be significantly correlated at $p = 0.0005$ level. Memory and metacognitive/social ($r=.373$), cognitive and affective ($r=.255$), compensation and metacognitive ($r=.287$), metacognitive and affective ($r=.335$) and affective and social strategies ($r=.248$) were also significantly correlated at $p < 0.05$. The strongest correlation was revealed in cognitive and metacognitive at $r = .611$ and also metacognitive and social strategies at $r = .591$

In Latino samples shown in table 24, memory and cognitive/ metacognitive/affective ($r=.521$, $r=.480$, and $r=.544$, respectively), cognitive and metacognitive/affective/social strategies ($r=.718$, $r=.493$, $r=.505$, respectively) and

For Asian samples shown in Table 25, statistical results revealed that memory

Table 23

Correlations Among the Six Language Learning Strategies Used by Male Samples.

	Mem.	Cog.	Com.	Meta.	Aff.
Memory strategies					
Pearson Correlation					
p (2-tailed)					
<u>n</u>					
Cognitive strategies					
Pearson Correlation	.491**				
p (2-tailed)	<.005				
<u>n</u>	66				
Compensation strategies					
Pearson Correlation	.176	.231			
p (2-tailed)	.158	.062			
<u>n</u>	66	66			
Metacognitive strategies					
Pearson Correlation	.373*	.611**	.287*		
p (2-tailed)	.002	<.005	.020		
<u>n</u>	66	66	66		
Affective strategies					
Pearson Correlation	.483**	.255*	.016	.335*	
p (2-tailed)	<.005	.039	.901	.006	
<u>n</u>	66	66	66	66	
Social strategies					
Pearson Correlation	.341*	.473**	.177	.591**	.248*
p (2-tailed)	.005	<.005	.154	<.005	.044
<u>n</u>	66	66	66	66	66

** significant at $p > 0.01$ * significant $p > 0.05$

Table 24

Correlations Among the Six Language Learning Strategies Used by Latino Samples

	Mem.	Cog.	Com.	Meta.	Aff.
Memory strategies					
Pearson Correlation					
p (2-tailed)					
<u>n</u>					
Cognitive strategies					
Pearson Correlation	.521**				
p (2-tailed)	<.005				
<u>n</u>	75				
Compensation strategies					
Pearson Correlation	.174	.297*			
p (2-tailed)	.135	.010			
<u>n</u>	75	75			
Metacognitive strategies					
Pearson Correlation	.480**	.718**	.208		
p (2-tailed)	<.005	<.005	.074		
<u>n</u>	75	75	75		
Affective strategies					
Pearson Correlation	.544**	.493**	.120	.474**	
p (2-tailed)	<.005	<.005	.306	<.005	
<u>n</u>	75	75	75	75	
Social strategies					
Pearson Correlation	.374*	.505**	.082	.504**	.388*
p (2-tailed)	.001	<.005	.482	<.005	.001
<u>n</u>	75	75	75	75	75

** significant at $p > 0.01$ * significant $p > 0.05$

Table 25

Correlations Among the Six Language Learning Strategies Used by Asian Samples

	Mem.	Cog.	Com.	Meta.	Aff.
Memory strategies					
Pearson Correlation					
p (2-tailed)					
<u>n</u>					
Cognitive strategies					
Pearson Correlation	.484**				
p (2-tailed)	<.005				
<u>n</u>	72				
Compensation strategies					
Pearson Correlation	.186	.312*			
p (2-tailed)	.117	.008			
<u>n</u>	72	72			
Metacognitive strategies					
Pearson Correlation	.259*	.435**	.227		
p (2-tailed)	.028	<.005	.056		
<u>n</u>	72	72	72		
Affective strategies					
Pearson Correlation	.292*	.106	-.009	.052	
p (2-tailed)	.013	.374	.942	.663	
<u>n</u>	72	72	72	72	
Social strategies					
Pearson Correlation	.191	.460**	.352*	.457**	.056
p (2-tailed)	.108	<.005	.002	<.005	.642
<u>n</u>	72	72	72	72	72

**significant at $p > 0.01$ * significant $p > 0.05$

and cognitive ($r=.484$), cognitive and metacognitive/social ($r=.435$ and $r=.460$, respectively) and metacognitive and social strategies ($r=.457$) were detected to be significantly correlated at 0.005 level of confidence. Memory and metacognitive/affective strategies ($r=.259$ and $r=.292$, respectively), cognitive and compensation strategies ($r=.312$) compensation and social strategies ($r=.352$) were significantly correlated at $p < 0.05$. The strongest correlation was found between memory and cognitive strategies at $r = .484$.

As for the whole sample shown in table 26, statistical results revealed that memory and cognitive/metacognitive/affective ($r=.495$, $r=.340$, $r=.410$, respectively), cognitive and compensation/metacognitive/affective/social ($r=.296$, $r=.578$, $r=.331$, and $r=.484$, respectively), and metacognitive and affective/social strategies ($r=.296$ and $r=.495$) were significantly correlated at $p = 0.0005$. Memory and compensation/social, compensation and metacognitive, and affective and social strategies are significantly correlated at $p < 0.05$. The strongest correlation was found between cognitive and metacognitive strategies at $r=.578$.

As for gender differences in regard to the relationships among strategy use, cognitive strategy use are closely related metacognitive strategies for both genders. For females, nonetheless, cognitive strategy use are closely related to memory strategy use. For males, metacognitive strategies are closely related to social strategy use. For both males and females, social strategy are modestly related to both cognitive and metacognitive strategies.

In differences between Asians and Latinos, cognitive and metacognitive strategy use are the most strongly related among Latino samples. For Asians, on the other hand,

Table 26

Correlations Among the Language Learning Strategies Used by the Whole Samples

	Mem.	Cog.	Com.	Meta.	Aff.
Memory strategies					
Pearson Correlation					
p (2-tailed)					
n					
Cognitive strategies					
Pearson Correlation	.495**				
p (2-tailed)	.005				
n	147				
Compensation strategies					
Pearson Correlation	.179*	.296**			
p (2-tailed)	.030	.005			
n	147	147			
Metacognitive strategies					
Pearson Correlation	.340**	.578**	.193*		
p (2-tailed)	.005	.005	.019		
n	147	147	147		
Affective strategies					
Pearson Correlation	.410**	.331**	.067	.296**	
p (2-tailed)	.005	.005	.422	.005	
n	147	147	147	147	
Social strategies					
Pearson Correlation	.268*	.484**	.161	.495**	.274*
p (2-tailed)	.001	.005	.051	.005	.001
n	147	147	147	147	147

** significant at $p > 0.005$ * significant $p > 0.05$

memory strategy use and cognitive strategy use are the most significantly related. For both Asians and Latinos, social strategy use are also modestly related to both cognitive and metacognitive strategies.

Throughout the five groups, memory and cognitive strategy use, cognitive and metacognitive/social strategy use, and metacognitive and social strategy use were all highly to moderately correlated. Among them, however, cognitive and metacognitive strategy use were the most correlated. Compensation strategies were found to be least correlated with other strategies in all groups.

Research Question Eight

What are the relationships between language learning strategies and the following dependent variables: (a) motivational strength; (b) motivational type; (c) self-ratings of proficiency level; (d) school majors; (e) years studying English; (f) length of stay in the United States; and (g) the number of languages spoken, and which of the strategies best predicts the learner's language learning strategy use.

Null Hypothesis Eight

There are no relationships between language learning strategies and the seven independent variables.

Bivariate correlation were performed to determine the relationships between language learning strategies and the following six variables: (a) motivational strength; (b) motivational type; (c) self-ratings of proficiency level; (d) years studying English; (e) length of staying in the United States; and (f) the number of languages spoken. A One-way ANOVA Post Hoc Multiple Comparison was performed to detect the differences among

school majors with regard to language learning strategy use.

Table 27 illustrates frequency and percentage of levels of motivation as reported by the ESL participants. Of 147 participants, slightly less than half of them reported that they are highly motivated to learn English. Approximately 74% of them reported that they are either very motivated or highly motivated. Only one participant reported not being at all motivated.

Table 28 shows the frequency and percentage of self-rating of English proficiency as reported by subjects. A majority of them, 87 subjects (59.2%), reported that they have a good English proficiency compared to the others in the same program. The students who answered that their English proficiency is either good or poor accounts for 84.4% (124) of all the subjects.

Table 29 reveals the frequency and percentage of years of studying English as reported by the subjects. The majority of ESL students, 40.1% of the total, reported having studied English for one to three years. Those students who had studied English for seven to nine years account for 23.8%, of the total number, those who had studied it for more than ten years 21.8%, and those who had studied it for four to six years account for only 14.3% of all the subjects in this research study.

Table 30 illustrates the frequency and percentage for the length of stay in the United States as reported by the subjects. The majority of the ESL students 53.7% of the total, reported to having stayed in the United States from one month to six months. Approximately one-third of the subjects (29.8%), reported having stayed in this country for seven to 12 months. The subjects in the United States who have remained for 13 to 18

Table 27

Frequency and Percentage Table for Level of Motivation

Level of Motivation	Level				
	1 Not at all Motivated	2 Somewhat Motivated	3 Fairly Motivated	4 Very Motivated	5 Highly Motivated
Frequency	1	11	27	38	70
Percentage	.7	7.5	18.4	25.9	47.6

Table 28

Frequency and Percentage Table for Self-ratings of Proficiency

Self-ratings of Proficiency	Proficiency Level			
	1 Poor	2 Fair	3 Good	4 Excellent
Frequency	11	37	87	12
Percentage	7.5	25.2	59.7	8.2

Table 29

Frequency and Percentage Table for Years of Studying English

Years of Studying English Level	Years			
	1 1-3 years	2 4-6 years	3 7-9 years	4 More than 10 years
Frequency	59	21	35	32
Percentage	40.1%	14.3%	23.8%	21.8%

Table 30

Frequency and Percentage Table for Length of Stay in the United States

Length of Stay in the United States Level	Length			
	1 1-6 months	2 7-12 months	3 13-18 months	4 More than 19 months
Frequency	79	43	13	12
Percentage	53.7	29.3	8.8	8.2

months and for more than 19 months represent 8.8% and 8.2%, respectively of the total subjects in the research study.

Table 31 illustrates the frequency and percentage of the numbers of languages spoken reported by the subjects. A vast majority of the subjects, 84.4% of the total, reported speaking only one language in addition to their native language. Only 15.6% of the total number of subjects reported speaking more than one language in addition to their native language.

Table 32 illustrates frequency and mean scores of two types of motivation reported by the subjects. The vast majority of the subjects, 81.6% of the total subjects, reported having instrumental motivation; remaining 18.4% reported having intrinsic motivation.

As shown in Table 33, statistical results revealed a significant correlation between the use of language learning strategies and motivational levels, and also between the use of language learning strategies and self-ratings of proficiency. No statistically significant correlations were found between the use of language learning strategies and other independent variables.

Research Question Nine

What are the relationships between language learning strategies and school major ?

Null Hypothesis Nine

There is no relationship between language learning strategies and school majors.

Post Hoc Multiple Comparison-Tukey's HSD was performed to determine the relationships between language learning strategies and school majors.

Table 34 illustrates the frequency and percentage of four different types of school

Table 31

Frequency and Percentage Table for Other Languages Spoken

Other Languages Spoken	The numbers of Languages	
	1 Speakers' native language and English	2 Speaker's native language and English, and other languages
Level		
Frequency	124	23
Percentage	84.4	15.6

Table 32

Frequency and Percentage Table for Types of Motivation

Types of Motivation	Motivation	
	1 Intrinsic Motivation	2 Instrumental Motivation
Frequency	27	120
Percentage	18.4	81.6

Table 33

Summary of Bivariate Correlations Between Language Learning Strategies and Levels of Motivation, Years of Studying English, Self-ratings of Proficiency, Motivational Types, Length of Stay in the United States, and Other Languages Spoken

Variable	N	p	r
Levels of Motivation	147	.001	.340
Years of studying English	147	.606	-.043
Self-ratings of Proficiency	147	.003	.246
Motivational Types	147	.982	.002
Length of Stay in the U.S.	147	.685	.034
Other languages Spoken	147	.077	.147

p<0.05

Table 34

Frequency and Percentage Table for School Major

School Major	Majors			
	Education/ Liberal Arts	Business/ Law	Science/Computer Health Science	Undecided
Frequency	23	45	47	32
Percentage	15.6	30.6	32.0	21.8

majors reported by the subjects. The majority of these students, 62.6% of the total, weremajoring in either science/computer/health science or business/law. Those subjects, whoreported being undecided for their major account for 21.8%. The subjects with education/liberal arts majors account for only 15.6% of the total.

As shown in Table 35, statistical analysis revealed significant differences between business/law majors and science/computer/health science majors. This explains that students with science/computer/health sciences majors use significantly more strategies than those with business/law majors. Although the difference between education/liberal arts majors and business/law majors is not statistically significant, the difference is quite substantial.

Research Question Ten

Which independent variables have the greatest influence on the use of language learning ?

Null Hypothesis Ten

No independent variables have significant influence on the use of language learning strategies. A regression anaysis was performed to determine which of the following variables: (a) gender; (b) culture; (c) motivational strength; (d) motivational type; (e) self-ratings of proficiency level; (f) years of studying English; (g) length of stay in the United States; and (h) the number of languages spoken, have the greatest influence on the use of language learning strategies.

As shown in Table 36, statistical analyses shows significant influences of motivation on the use of the language learning strategies. Although gender and self-ratings

Table 35

Summary of Post Hoc Multiple Comparison-Tukey's HSD for the Effect of School

Major on Language Learning Strategies

School Majors	p
Education/Liberal Arts	
Business/Law	.068
Science/Computer/Health Sci.	.954
Business/Law	
Education/Liberal Arts	.068
Science/Computer/Health Sci.	.047
Science/Computer/Health Sci.	
Education/Liberal Arts	.954
Business Law	.047

$p \leq 0.05$

Table 36

Summary of Regression for the Effect of the Eight Independent Variables on LanguageLearning Strategies.

Independent Variables	t	p
Gender	1.328	.186
Nationality	-.735	.463
Level of Motivation	3.631	<.001
Years of Studying English	-.205	.838
Level of Self-ratings of Proficiency	1.408	.161
Motivational Types	-.025	.980
Length of Stay in the U.S.	.583	.561
Other Languages Spoken	1.734	.805

of proficiency level have substantial influences on the use of language learning strategies, the influences are not statistically significant.

Summary

The results of the research conducted for this study largely support previous research, which shows greater use of strategies by females than by males. Nonetheless, gender difference was not found to be statistically significant.

A few research studies argue that Latino students prefer working with others. They tend to be extroverted and prefer cooperative learning and physical activities. Asian students, on the other hand, are analytic and detail-oriented. They are highly introverted and avoid interactions with others. This study largely supports these findings in that Latino students reported using greater social strategies than did their Asian counter parts.

This research study also revealed that the level of motivation is significantly related to the use of language learning strategies. In other words, the more students become motivated, the more strategies they use. Self-ratings of proficiency level is also significantly related to language learning. The number of languages spoken by ESL learners appears to be substantially associated with language strategy use. However, this factor was not revealed as statistically significant in this study.

According to the present research, motivation is found to be the single most influential factor for language learning strategy use. Gender and self-ratings of proficiency level appear to be substantial predictors for language strategy use. However, they were not revealed to be statistically significant in the present research.

A student's major is another predictor for language strategy use. ESL students who

major in sciences/computer sciences /health science use significantly more strategies than their business/law major counterparts. Also, there was a substantial difference in language strategy use between the students who major in education/liberal arts and those who major in business/law. However, the difference was not revealed as statistically significant.

This chapter presented an analysis of data and results of this dissertation study. Chapter V will present a summary, discussion, implications, implications for classroom instructions, and recommendations for further research.

CHAPTER V
SUMMARY, DISCUSSION, IMPLICATIONS,
IMPLICATIONS FOR CLASSROOM INSTRUCTION AND RECOMMENDATION

Introduction

This chapter is organized into four sections. The first section includes a summary of the purpose and procedures and findings of the study. The conclusions drawn from the findings are presented in the second section. The third section presents the implications of the study; recommendations for further research are offered in the fourth section.

Analysis of the Data

This chapter presents the results of the statistical analysis of the data collected from 147 Asian and Latino ESL students who are enrolled in five mid sized to large universities in the Southeastern region of America. The purpose of this study was to investigate whether or not differences exist between female and male ESL students and additionally Latino and Asian ESL students in the use of language learning strategies. This study also investigated what variables may affect the choice of ESL students' language learning strategies.

The following research questions were addressed by this study.

Research Questions

Using the SILL (a self-reported questionnaire, Strategy Inventory for Language Learning, developed by Oxford, 1986), the study was designed to examine the following questions:

1. Is there a difference between male and female ESL students in the use of language

- learning strategies as a whole ?
2. Are there differences between male and female ESL students in the use of the following six strategies: memory; cognitive; compensation; metacognitive; affective; and social strategies ?
 3. Is there a difference between Latino and Asian ESL students in the use of language learning strategies as a whole ?
 4. Are there differences between Latino and Asian ESL students in the use of the following six strategies: memory; cognitive; compensation; metacognitive; affective; and social strategies ?
 5. Are there differences among Latino females, Asian females, Latino males and Asian males in the use of language learning strategies as a whole ?
 6. Are there differences among the following four groups: Latino females; Asian females; Latino males; and Asian males in the use of the six language learning strategies ?
 7. What are the relationships among the six language learning strategies used by male, female, Latino, and Asian and ESL students as a whole ?
 8. What are the relationships between the language learning strategy use and the following six independent variables: (a) motivational strength; (b) self-ratings of proficiency level; (c) years of studying English; (d) length of stay in the United States; (e) the number of languages spoken; and (f) motivational type ?
 9. What is the relationship between the language learning strategies and career orientations ?

10. What are the variables that have greatest influence on the use of language learning strategies: (a) gender; (b) cultural background; (c) motivational strength; (d) motivational type; (e) self-ratings of proficiency level; (f) years of studying English; (g) length of stay in the United States; and (h) the number of languages spoken ?

The self-reported questionnaire (SILL) employed as a primary instrument for this study was developed by Oxford (1985) at the University Alabama in Tuscaloosa. The questionnaire consists of 50 close-ended questions. The background questionnaire was developed by the researcher. The questionnaire consists of five open-ended, and eight close-ended, questions.

The sample population in this study consists of 147 Latino and Asian ESL students in five middle- to large- sized universities in the Southeastern region of the United States. The questionnaire was distributed by the researcher to individual participants in each of the five participating institutions and was then collected by the researcher and ESL instructors at the participating institutions. Data analysis began with the reading of the questionnaires when they were returned.

The Summary of the Results

Results of the analysis of the data for this research study indicate the following

1. There was no gender difference in the use of language learning strategies as a whole at the 0.05 level of significance. Females, however, tend to use learning strategies more often than males. As for differences in the use of the six categories of language learning strategies, the results of this study revealed that females use

social and affective strategies significantly more often than males. Females outscored males on five strategies: memory; cognitive; metacognitive; affective; and social strategies. Males, on the other hand, use compensation strategies slightly more often than females.

2. There was no statistically significant difference between Latinos and Asians in the use of language learning strategies as a whole. Nonetheless, Latinos in general reported using strategies more frequently than Asians. In the use of the six categories of language learning strategies, statistically significant differences were found in social and metacognitive strategies with more frequent use by Latinos.

Latinos outscored Asians in four strategies: cognitive, metacognitive, affective, and social strategies. Asians, by contrast, use memory and compensation strategies slightly more frequently than Latinos.

3. There was no statistically significant differences in the use of language learning strategies as a whole among Latino females, Latino males, Asian females and Asian males. Latino females, however, use strategies most often. The largest difference, although it is not statistically significant, was found between Latino females and Asian males with Latino females using strategies most often and Asian males least often. In the use of the six categories of strategies, no significant difference was detected among these groups. Latino females, nonetheless, outscored other groups in four types of strategies: cognitive, metacognitive, affective and social strategies. Asian males outperformed other groups in two strategies: memory and compensation strategies.

4. Relationships among the six categories of language learning strategies employed by females, males, Latinos, Asian, and the whole sample were also investigated in this study. In the female samples, memory and cognitive strategies ($r=.529$), cognitive and metacognitive/affective/social strategies ($r=.548$, $r=.398$, and $r=.432$ respectively), and metacognitive and social strategies ($r=.412$) were mildly correlated ($p < 0.005$ level). The strongest correlation was found between cognitive and metacognitive strategies at $r=.548$. As to male samples, memory and cognitive/affective strategies ($r=.491$ and $r=.483$ respectively), cognitive and metacognitive/social strategies ($r=.611$ and $r=.473$ respectively), metacognitive and social strategies ($r=.691$) were mildly correlated ($p < 0.001$ level). The strongest correlation was also revealed between cognitive and metacognitive strategies at $r=.611$. In the Latino samples, memory and cognitive/ metacognitive/affective strategies ($r=.521$, $r=.480$, $r=.544$ respectively), cognitive and metacognitive/affective/social strategies ($r=.718$, $r=.504$, $r=.505$), metacognitive and affective/social strategies ($r=.474$, and $r=.504$) were highly to mildly correlated ($p < 0.001$ level). The strongest correlation was found between cognitive and metacognitive strategies at $r=.718$. For Asian samples, memory and cognitive ($r=.484$), cognitive and metacognitive/social strategies ($r=.435$ and $r=.460$ respectively), and metacognitive and social strategies ($r=.457$) were mildly correlated ($p < 0.001$ level). The strongest correlation was found between memory and cognitive strategies at $r=.484$. As to the whole sample, memory and cognitive/metacognitive/affective strategies ($r=.495$, $r=.340$, and $r=.410$

respectively), cognitive and compensation/metacognitive/affective/social strategies ($r=.296, r=.578, r=.331, \text{ and } r=.484$ respectively), metacognitive and affective/social strategies ($r=.296$ and $r=.495$ respectively) were mildly correlated ($p < 0.005$ level). The strongest correlation was found between cognitive and metacognitive strategies. Throughout the five groups: females, males, Latinos, Asians, and the whole sample, memory and cognitive, cognitive and metacognitive/social, and metacognitive and social strategies were all mildly correlated except for high correlation between cognitive and metacognitive strategies at $r=.718$ among Latino students. Cognitive and metacognitive strategies were the most correlated. Compensation and affective strategies were found to be least correlated in all groups.

5. The relationship between the use of language learning strategies and the six independent variables. At the 0.05 level, only two variables, levels of motivation and self-ratings of proficiency, were found to be significantly correlated with language learning strategy use. Nonetheless, their correlations are weak. Correlation between other languages spoken and language learning strategy use is not statistically significant. This weak statistical link may be due to the small sample size of this study. Correlations between motivational types/length of stay in the United States and language learning strategy use were not revealed to be statistically significant. Although the correlation between years of studying English and language learning strategy use was weak and not significant, years of studying English was found to be negatively correlated with the use of language learning

strategies.

6. Statistically significant differences were found in school majors in regard to language learning strategy use. Students who major in science/computer/health science use significantly more strategies than do business/law students. Although, students majoring in education/liberal arts reported far more frequent use of the strategies, the difference between them and those who were majoring business/law was not statistically significant. This weak statistical link also may be due to the small sample size of this research study.
7. Statistically significant results were revealed on what variables have the greatest influence on the use of language learning strategies. Motivation is the single most influential factor on language strategy use ($p < .01$). The influence of gender and level of self-ratings of proficiency were not revealed as statistically significant. Their influence however, was substantial. Cultural background, years of studying English, motivational types, and length of stay in the United States do not have a significant effect on learner's use of strategies.

Conclusions

Several conclusions were drawn from the results of this research study.

1. Based on the findings of this study concerning gender difference in the use of language learning strategies, there seems to be slight but consistent differences between males and females. Females are especially skilled in the use of socially-based strategies which involves interactions with others; this is also directly reflected their greater social orientation (Oxford & Nyikos, 1989; Ehrman &

Oxford, 1989). This finding is consistent with female speech behavior in the first language (Lakoff, 1975; Thorn, Kramarae, & Henry, 1983; Maccoby & Jacklin, 1974), in that females ask more questions, show more interest in others, and interact with others more than do males. Also males' less frequent use of interaction strategies may be related to their conflictive nature with others in communication (Jones, 1980; Tannen, 1990). Females also use more strategies which manages the affective side of language learning (Green & Oxford, 1995). These strategies involve establishing connections and sharing personal experiences with others (Tannen, 1990), and noticing and managing anxiety (Maccoby & Jacklin, 1974). These findings support many previous research findings on gender differences across different cultures (Bedell, 1993; Ehrman & Oxford, 1989; Green & Oxford, 1995; Oxford, Park-Oh, Ito, & Sumrall, 1993; Rossi-Le, 1989). Given that subtle but consistent differences between genders in language learning exist and exist across cultures, these differences may be manifested due to the genders' different ways of socialization and biological features.

2. Ethnicity appears to be another factor that characterizes language learners' strategy use. Latino students use more socially-based strategies than their Asian counterparts. They seem to involve themselves more actively in interactions with native speakers and others. This aspect of Latino students is consistent with other studies on learning styles in that they are global (non-rule oriented)(Oxford & Anderson, 1995), feeling oriented (emphasizing personal relationship) (Oxford, Hollaway & Muriello, 1992), field dependent (group-oriented) (Violand-Sanchez,

- 1995). Latino students also use metacognitive strategies significantly more than Asian students (Green 1991). A number of studies report that learners' cultural backgrounds have significant effect on learning styles (Oxford & Anderson, 1995;
3. There seems to be a mild positive linear relationship among certain language learning strategies. This may explain that as one uses one style of strategies, he/she may also use another style of strategies. Thus, the more strategy is used, the more the other will be used. Among all strategies, the use of cognitive strategies are related to the most strategy use, especially with the use of metacognitive strategies. Use of social strategies is related to the use of cognitive and metacognitive strategies. Use of memory strategies goes with cognitive strategies.
 4. Among variables affecting one's use of language learning strategies, levels of motivation and self-ratings of proficiency level appear to have positive linear relationships with language strategy use. This also explains that the more one is motivated or the higher he/she rates his English proficiency, he/she may use language learning strategies more frequently than those who are less motivated or rate themselves lower. The number of languages spoken seems to be positively correlated with the use of language learning strategies. This study's result, however, did not support this statistically. This may be due to the small sample size of this research study.
 5. There appear to be differences among learners with different school majors in regard to language strategy use. Students majoring in science/computer/health science use more strategies than those majoring in business/law. Although the

difference between students with education/liberal arts major and students with business/law major was not statistically supported, there may still be substantial differences between these two groups of students with education/liberal arts major students use more strategies.

6. Among variables affecting one's use of language learning strategies, motivation is the most influential variable in one's use of language learning strategies. The influences of gender and self-ratings of proficiency levels on the use of language learning strategies were not supported statistically. However, the study results were very close to statistically significant at 0.05 level. Larger sample may well reveal statistically significance in this area.

Implications

The conclusions drawn from the findings of this study suggest several implications.

1. The study's results indicate that level of motivation may be a significant predictor for a given learner's language strategy use (Oxford & Nyikos, 1989; Oxford, Park-Oh, Ito & Sumrall, 1993). As learners become more motivated, they may use more strategies.
2. The results of this study also confirm that learners' self-evaluation in the target language proficiency is related to their strategy use (Chang, 1991; Oxford & Nyikos, 1989; Watanabe, 1990). The higher they evaluate their target language proficiency, the more they tend to use strategies. It may be assumed then that learner confidence and target language proficiency may have a causal relationships with each other.

3. Using one type of strategies may trigger another type of strategies. This research study's results indicate that cognitive strategy use is positively related to most other strategies such as metacognitive, social, and memory strategies. In the same way, use of metacognitive strategies is related to the use of social strategies, and vice versa.

Implications for Classroom Instructions

It is particularly useful for male students to be made aware of the importance of learning strategy use, especially the use of social and interactive strategies. Language instructors should encourage them to use strategies with conscious effort, particularly the ones they do not prefer to use such as "practicing English with others," "ask native speakers to slow down or to say again," and "paying attention when someone is speaking English," and remind them to use them consistently. Also ESL instructors need to make them aware that it is social strategies that may differentiate successful language learners from poor ones (Green & Oxford, 1995).

Students as well as language instructors should know that learners' cultural backgrounds also influence learning styles well as learning strategies (Rossi-Li, 1995). For example, it is known that Latino students are more extrovert and prefer to learn languages through classroom activities and interactions with others. Naturally, they constantly look for people to speak English. They are skilled in scheduling themselves for their study. They think about their progress often and have clear goals to learn English. Asian students, on the other hand, tend to be introverts and do not often interact with other people. However, they are good at memorization with making flash cards and using rhymes. They

review lessons well and they practice writing and make summaries in English well.

Among the factors influencing language learning and strategy choice, motivation is the most influential factor in language strategy use. Learners' self-perception of their target language proficiency, "which is intimately related to self-esteem" (Oxford & Nyikos, 1989, p. 295) also seems to be an influential factor in language learning. Oxford explains (1995) that "self-esteem is one of the primary affective elements... and influences motivation to keep on trying to learn" (p.141). It is difficult to tell the exact relationships among language learning strategy use, perceived proficiency, and motivation. Nonetheless, it is generally understood that more use of strategies creates higher perceived proficiency and this leads to stronger motivation. Stronger motivation, in turn, stimulates more strategy use (Oxford & Nyikos, 1989).

It may be a good idea for language instructors to bring some research results in gender differences in regard to language learning and acquisition along with the knowledge of biological and sociocultural differences between men and women in the classroom. Open discussion with students may further stimulate their curiosity in learning of the target language and it may lead to stronger motivation. It may also be beneficial as well as stimulating for both students and instructors to share typical notions attached to certain behaviors and temperament of a given cultural or ethnic group. Students may learn a great deal about their strength and shortcomings in language learning from the discussion. This may lead them to the conscious use of more learning strategies. Both language instructors and language learners must always be aware of this three-way interactions--motivation, perceived proficiency, and strategy use.

This researcher believes that it is the language instructors' responsibility to make students aware that there is a variety of strategies available for different language tasks such as speaking, listening, writing, and reading and that successful learners apply appropriate strategies for different tasks. In addition, they use a wider variety of strategies and they use them more often than unsuccessful learners. It is also important for language instructors to assess individual learners' learning styles such as whether one is extroverted or introverted, feeling-oriented or thinking-oriented to help students recognize their own learning styles. This learning style assessment will help language instructors capture language learning styles unique to individual learners with less effort and thus enable them to potentially provide more individualized instruction in the ESL classroom. It also may help learners to be aware of their own learning styles and strategy use associated with the styles. This awareness may promote the expansion of their normal strategy use into a new territory (Oxford, 1995) and help learners realize that more strategy use leads to higher perceived proficiency.

Recommendations

The findings of this study suggest the following recommendations for further research. Such research should contribute to the understanding of the factors that influence language learners' choice of strategies which contribute to the better acquisition of the second language as well as to improve instructions in the language classroom.

1. Replication of this study should be conducted world-wide for its generalizability. This would help identify whether or not gender differences exist across cultures and ethnicities. The replication of this study might help ascertain if gender

differences in learning styles and strategies were attributed to biological differences and differences in socialization.

2. Identifying and comparing learning styles and strategies of language learners with various cultural backgrounds is needed since cognitive and learning styles and their strategies are acquired through social interactions and interactional techniques (Nelson, 1995), which are more or less culturally bound. Studying cognitive/learning styles and the learning strategies of Middle Easterners, Africans, Latinos, East and West Europeans, Americans, Asians in the Far East and in Central regions, and American Indians, would help to better understand learning styles and language learning strategy use unique to each cultural or ethnic group. Also, published research studies on learning styles and strategy use for different cultures need to be replicated to provide more consistent information.
3. Further research is needed to identify the relationship between learning styles such as extroverted, introverted, global, analytic, visual, and auditory and language learning strategies. This would help language instructors readily identify individual characteristics of their ESL students.
4. Causal comparative research would help identify what variables cause more strategy use and to what degree these variables influence their use and choice of strategies. Identification of these variables would help language instructors provide incentives which directly or indirectly help learners to use more and a greater variety of strategies.
5. Comparing learners' achievement test scores and language strategy use further

clarifies the true relationships between language strategy use and students' achievement in learning the target language. This may also help successful and unsuccessful language learners in regard to their language strategy use.

6. A larger sample size would most assuredly assist in a better understanding of gender and cultural differences in the use of language learning strategies, and relationships between affecting variables and learners' use of strategies.

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Appendices

Appendix A

Approval from Human Subjects Committee



06/03/98

Office of Research
404 Andy Holt Tower
Knoxville, Tennessee 37996-2142
PHONE: (423) 974-3466
FAX: (423) 974-2805
LIB: <http://www.research.utora>

IRB # : 5575 B

Title : Differences in language learning strategies between female/male and Latino/Asian ESL students and variables influencing the choice of language learning ...

Osanai, Dai
Foreign Language
P.O. Box 8081
Statesboro, GA 30460

Davis-Wiley, Dr. Patricia
Foreign Language
5 Claxton Addn.
Campus

Your project listed above was reviewed. It qualified for expedited review and has been approved.

This approval is for a period ending one year from the date of this letter. Please make timely submission of renewal or prompt notification of project termination (see item #3 below).

Responsibilities of the investigator during the conduct of this project include the following:

1. To obtain prior approval from the Committee before instituting any changes in the project.
2. To retain signed consent forms from subjects for at least three years following completion of the project.
3. To submit a Form D to report changes in the project or to report termination at 12-month or less intervals.

The Committee wishes you every success in your research endeavor. This office will send you a renewal notice (Form R) on the anniversary of your approval date.

Sincerely,

Brenda Lawson

Compliances

cc: Carol Kasworm

Appendix B

Approval from the Author of SILL Questionnaire



OFFICE OF THE DEAN

THE UNIVERSITY OF ALABAMA
College of Education

August 20, 1997

Dai Osanai
Department of Foreign Languages
P.O. Box 8081
Georgia Southern University
Statesboro GA 30460

Dear Mr. Osanai

Thank you for your interest in the SILL. I am glad to give you my official permission to use this instrument. I would very much appreciate if you would share with me the results of the research you intend to do using the SILL.

Sincerely,

A handwritten signature in cursive script that reads "Rebecca L. Oxford".

Rebecca L. Oxford
Associate Dean

Appendix C

A Letter of Permission from the Director of the American Language Program
at the University of Georgia



The University of Georgia

Georgia Center for Continuing Education
Athens, Georgia 30602-3603


February 24, 1998

TO WHOM IT MAY CONCERN:

I am writing this letter to verify that Dai Osanai has my permission to conduct research on second language acquisition at The University of Georgia American Language Program. It is my understanding that Mr. Osanai's research will consist of a questionnaire to be completed by American Language Program students at a time to be determined later by Mr. Osanai and myself.

For further information, please contact me at the address indicated above or at the numbers indicated below.

Sincerely,


Martyn J. Miller, Ph.D.
Department Head
American Language Program

TELEPHONE: 706.542.4695
FAX: 706.542.8013
e-mail: millerm@gactr.uga.edu

Site of Olympic Soccer, Volleyball, and Rhythmic Gymnastics 1996

At the University of Georgia, Athens, Georgia

Appendix D

A Letter of Permission from the Director of the English Language Institute
at the University of Alabama



ENGLISH LANGUAGE INSTITUTE

THE UNIVERSITY OF ALABAMA

February 24, 1998

Dai Osanai
Department of Foreign Languages
P.O. Box 8081
Georgia Southern University
Statesboro, GA 30460

Dear Mr. Osanai,

This is to confirm that you have permission from me to conduct the research that you have proposed at The University of Alabama English Language Institute (ELI) during our Spring 2, 1998 session (March 4 - May 6). It is understood that student participation in your research will be completely voluntary and will take place outside of ELI classes.

Please contact me if you have any questions.

Sincerely,

Bill Wallace

Bill Wallace
Co-Director / Director of
Internal Programs

Appendix E

A Letter from the Director of the English as a Second Language Program

at Kennesaw State University



Department of Learning Support Programs

October, 7, 1998

To whom it may concern.

I give a permission to Dai Osanai to do data collection from my international students at Kennesaw State University during 1998 Fall semester

Sincerely,

Elaine Thornton, Director
ESL Program

ET/th

1000 Chastain Road, Kennesaw, GA 30144-5591
(770) 423-6207 • Fax: (770) 423-6748

Appendix F

A Letter of Permission from a Director of the Intensive English Program

at Georgia Southern University



ACADEMIC EXCELLENCE
**GEORGIA
SOUTHERN
UNIVERSITY**

CONTINUING EDUCATION AND PUBLIC SERVICES
POST OFFICE BOX 8124
STATESBORO, GEORGIA 30420-8124
PROGRAMS (912) 681-8555 / FAX: (912) 681-0306
CONFERENCE CENTER (912) 681-5552 / FAX: (912) 681-0247

February 26, 1998

Dear Mr. Osanai:

I have read the information regarding your research project on gender differences in language learning strategies, and as we discussed, I am willing to assist you in this project by allowing you a few minutes of class time to solicit Asian and Hispanic student volunteers from the Intensive English Program to participate in your study. I will be glad to make arrangements for you to visit our classes to seek volunteers, and I can also provide you with information about students' schedules so you can make plans to meet with all of the participants at a time that will not conflict with their classes in order to have them complete the questionnaire.

Our Intensive English classes begin on April 3, and our schedule will be set at that time. Since the beginning of the quarter is always very busy for us, I would like to suggest that you contact me around April 10 to make arrangements for your visits to our classes and to receive the information about student schedules that you will need to plan for your meeting with participants.

If you have additional questions, please let me know.

Sincerely,

Cynthia Hughes, Director
Intensive English Program

Appendix G

A Letter to Potential Participants

Differences in language learning strategies between female/male and Latino/Asian ESL students and variables influencing the choice of language learning strategies

June 2, 1998

Dear participants,

I am a doctoral student at The University of Tennessee, and am also teaching Japanese at Georgia Southern University in Statesboro, Georgia. My dissertation topic is "Gender and Cultural Differences In Language Learning Strategies and Affecting Variables on the Choice of Language Learning Strategies." The purpose of this study is to find whether or not there are differences between male and female students in using language learning strategies and also whether or not cultural differences and levels of motivation may influence the student choice of language learning strategies

I would like to ask your cooperation in this endeavor by filling out the following two questionnaire. It will take you approximately 40 minutes. The two questionnaire consists of seven pages. Your background information is asked on the first two pages followed by questions concerning your language learning strategies on the remaining pages.

All of your responses will be kept confidential. You are asked to write the last four digits of your social security number on the questionnaire to use as a follow-up. Participation in this study is completely voluntary and you may decline to participate or withdraw from the study at any time without any penalty. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed as you request. Participation or non-participation in this research study will not affect your class grade. Collected data is stored in a locked file drawer of my office, room 1351 in Forest Drive building at Georgia Southern University. As soon as the data is transferred to computer disks, your questionnaire will be completely destroyed. Your consent form will be stored in a locked file drawer in the main office of LCHU (Language, Communication, and Humanity Education Unit) located in the room 9 of Claxton Addition building at The University of Tennessee, Knoxville for three years after the completion of this study.

If you have any questions, please feel free to contact me at the address below or by phone at (912) 681-5281 or by e-mail at "dosanai@gsaix2.cc.gasou.edu" I will be glad to share the results of my research with you when the study is completed with a form of a letter or telephone. I appreciate your willingness to give of your time to participate for this questionnaire. Participants will receive a mag cup with your school logo on it as a token of appreciation. If you have any questions about your rights as a participant, contact the IRB Coordinator at the office of Research Services and Sponsored Program at 912-681-5465

I have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Participant's name _____

Participant's signature _____ **date** _____

Dai Osanai
Doctoral Candidate at The University of Tennessee, Knoxville
P.O. Box 8081 Foreign Languages Department

Appendix H
Background Questionnaire

Student Information

(PART I)

Please complete the following.

1. The last four digits of the social security _____

2. Age

- 15-24
- 25-34
- 35-44
- 45-54
- 55-64

3. Gender

- Male
- Female

4. Cultural Background

- Asian
- Latino

5. Level of motivation

- I am highly motivated to learning English
- I am very motivated to study English.
- I am motivated to study English.
- I am somewhat motivated to study English.
- I am not at all motivated to study English.

6. Length of time studying English: How long have you been studying English ? (including years you have learned English in your country)

- 1-3 years
- 4-6 years
- 7-9 years
- more than 10 years

7. How do you rate your overall proficiency level in English compared with the proficiency of other foreign students in your program ?

- Excellent
- Good
- Fair
- Poor

8. Why do you want to learn English ?

- I am interested in English.
- I am interested in American culture and people.
- I want to study at colleges and universities in the United States.
- I want to study at graduate schools of colleges and universities in the United States.
- I need it for travel.
- I need it for my future career.
- Other
(list) _____

9. How long have you been staying in the United States ?

- 1-6 months
- 7-12 months
- 13-18 months
- more than 19 months

10. Major: What do you major in ?

11. Native country:

12. Native language:

13. Other languages you speak (except for English) :

Appendix I

Strategy Inventory for Language Learning (SILL)

Version 7.0 (ESL/EFL)

By

Rebecca Oxford, Ph. D.

Strategy Inventory for Language Learning (SILL)

Version for Speakers of Other Languages Learning English

Strategy Inventory for Language learning (SILL)

Version 7.0 (ESL/EFL)

(c)R. Oxford, 1989

Directions

This form of the STRATEGY INVENTORY FOR LANGUAGE LEARNING (SILL) is for students of English as a second or foreign language. You will find statements about learning English. Please read each statement. On the separate worksheet, write the response (1, 2, 3, 4, or 5) that tells HOW TRUE OF YOU THE STATEMENT IS.

1. Never or almost never true of me
2. Usually not true of me.
3. Somewhat true of me.
4. Usually true of me.
5. Always or almost always true of me.

NEVER OR ALMOST NEVER TRUE OF ME means that the statement is very rarely true of you.

USUALLY NOT TRUE OF ME means that the statement is true less than half of the time.

SOMEWHAT TRUE OF ME means that the statement is true of you about half the time.

USUALLY TRUE OF ME means that the statement is true more than half of the time.

ALWAYS OR ALMOST ALWAYS TRUE OF ME means that the statement is true of you almost always.

Answer in terms of how well the statement describes you. Do not answer how you think you should be, or what other people do. There are no right or wrong answers to these statements. Put your answers on the separate worksheet. Please make no marks on the items. Work as quickly as you can without being careless. This usually takes about 20-30 minutes to complete. If you have any questions, let the teacher know immediately.

EXAMPLE

1. Never or almost never true for me.
2. Usually not true of me.
3. Somewhat true of me.
4. Usually true of me.
5. Almost or almost always true of me.

Read the item, and choose a response (1 through 5 as above), and write in the space after the item.

I actively seek out opportunities to talk with native speakers of English. _____

You have just completed the example item. Answer the rest of items on the worksheet.

Strategy Inventory for Language Learning

Version 7.0 (ESL/EFL)

(C) R. Oxford, 1989

1. Never or almost never true of me
2. Usually not true of me
3. Somewhat true of me
4. Usually true of me
5. Always or almost always true of me

(Write answers on worksheet)

PART A

1. I think of relationships between what I already know and new things I learn in English.
2. I use new English words in a sentence so I can remember them.
3. I connect the sound of a new English word and an image or a picture of the word to help me remember the word.
4. I remember a new English word by making a mental picture of a situation in which the word might be used.

5. I use rhymes to remember new English words.
6. I use flash cards to remember new English words.
7. I physically act out new English words.
8. I review English lessons often.
9. I remember new English words or phrases by remembering their location on the page, on the board, on a street sign.

PART B

10. I say or write new English words several times.
11. I try to talk like native English speakers.
12. I practice the sounds of English.
13. I use the English words I know in different way.
14. I start conversations in English.
15. I watch English language TV shows spoken in English or go to movies spoken in English.
16. I read for pleasure in English.
17. I write notes, messages, letters, or reports in English.
18. I first skim an English passage (read over the passage quickly) then go back and read carefully.
19. I look for words in my own language that are similar to new words in English.
20. I try to find patterns in English.
21. I find the meaning of an English word by dividing it into parts that I understand.
22. I try not to translate word-for-word.
23. I make summaries of information that I hear or read in English.

PART C

24. To understand unfamiliar English words, I make a guess.
25. When I can't think of a word during a conversation in English, I use gestures.
26. I make up new words if I do not know the right one in English.
27. I read English without looking up every new word.
28. I try to guess what the other person will say next in English.
29. If I can't think of an English word, I use a word or phrase that means the same thing.

PART D

30. I try to find as many ways as I can to use my English.
31. I notice my English mistakes and use that information to help me become better.
32. I pay attention when someone is speaking English.
33. I try to find out how to be a better learner of English.
34. I plan my schedule so I will have enough time to study English.
35. I look for people I can speak to in English.
36. I look for opportunities to read in English as much as possible.
37. I have clear goals for improving my English skills.
38. I think about my progress in learning English.

PART E

39. I try to relax whenever I feel afraid of using English.
40. I encourage myself to speak English even when I am afraid of making a mistake.
41. I give myself a reward or treat when I do well in English.
42. I notice if I am tense or nervous when I am studying or using English.
43. I write down my feelings in a language learning diary.

44. I talk to someone else about how I feel when I am learning English.

PART F

45. If I do not understand something in English, I ask the other person to slow down or say it again.

46. I ask English speakers to correct me when I talk.

47. I practice English with other students.

48. I ask for help from English speakers.

49. I ask questions in English.

50. I try to learn about the culture of English speakers.

Your name _____ Date _____

Worksheet for Answering and Scoring
the Strategy Inventory for Language Learning (SILL)

Version 7.0 (ESL/EFL)

(c) R. Oxford, 1989

1. The blanks () are numbered for each item on the SILL.
2. Write your response to each item (that is , write 1, 2, 3, 4, or 5) in each of the blank.
3. Add up each column. Put the result on the line marked SUM.
4. Divide by the number under SUM to get the average for each column. Round this average off to the nearest tenth, as in 3.4.
5. Figure out your overall average. To do this, add up all the SUMS for the different parts of the SILL. Then divide by 50.
6. When you have finished, your teacher will give you the Profile of Results. Copy your averages (for each part and for the whole SILL) from the worksheet to the Profile.

SILL Worksheet (Continued)

Version 7.
(c) R. Oxford, 1989

Part A	Part B	Part C	Part D	Part E	Part F
1. _____	10. _____	24. _____	30. _____	39. _____	
45. _____					
2. _____	11. _____	25. _____	31. _____	40. _____	
46. _____					
3. _____	12. _____	26. _____	32. _____	41. _____	
47. _____					
4. _____	13. _____	27. _____	33. _____	42. _____	
48. _____					
5. _____	14. _____	28. _____	34. _____	43. _____	
49. _____					
6. _____	15. _____	29. _____	35. _____	44. _____	
50. _____					
7. _____	16. _____		36. _____		
8. _____	17. _____		37. _____		
9. _____	18. _____		38. _____		
	19. _____				
	20. _____				
	21. _____				
	22. _____				
	23. _____				

Sum _____	Sum _____	Sum _____	Sum _____	Sum _____
Sum _____				

÷9= _____	÷14 _____	÷6 _____	÷9 _____	÷6 _____
÷6 _____				

Overall Average ÷50 _____

Appendix J

Table 37

Mean scores for Individual SILL Questions Reported by the Whole Samples

Table 37

Mean scores for Individual SILL Questions Reported by the Whole Samples.

Item	Descriptions	Mean	SD
(A1-A9 Memory Strategies)			
A1	Relate what I already know and new things	3.69***	.99
A2	Use new words in a sentence	3.46**	1.04
A3	Connect the sound and image of a new word	3.50**	1.18
A4	Make a mental picture of a new word	3.31**	1.25
A5	Use rhymes to remember new words	2.59**	1.28
A6	Use flash cards to remember a new word	2.37*	1.28
A7	Physically act out a new word	2.54**	1.25
A8	Review lessons often	3.14**	1.22
A9	Remember new words and phrases by their locations	3.37**	1.26
(B1-B14 Cognitive Strategies)			
B1	Recite and write a new word	3.55***	1.18
B2	Try to talk like a native speaker	3.87***	1.09
B3	Practice the sounds of English	3.68***	1.05
B4	Use a new word differently	3.48**	1.14
B5	Initiate English conversation	3.29**	1.15
B6	Watch movies and TV in English	4.04***	1.07
B7	Read English for pleasure	3.21**	1.22
B8	Write notes and letters in English	3.38**	1.12
B9	Skim English passage, then I read it carefully	3.61***	1.02
B10	Look for similarities between English and my first language	3.22**	1.28
B11	Find patterns in English	3.33**	1.17
B12	Divide a new word into parts to find out meaning	3.09**	1.11
B13	Try not to do word-for-word translation	3.31**	1.33
B14	Summarize what I hear and read in English	2.82**	1.19
(C1-C6 Compensation Strategies)			
C1	Make a guess to understand	3.59***	1.12
C2	Use gestures when I can not find a word	3.80***	1.09
C3	Make up a new word when I can not find a right one	3.21**	1.25
C4	Try to guess meaning without referring to a dictionary	3.33**	1.26
C5	Try to guess what people say next	3.35**	1.17
C6	Look for similar words when I do not find exact words	3.99***	1.04
(D1-D9 Metacognitive Strategies)			
D1	Find as many ways to use English as possible	3.66***	1.06

Table 37 (continued)

Mean scores for Individual SILL Questions Reported by the Whole Samples

D2	Notice my English mistakes to become better	3.83*** .95
D3	Pay attention when someone speaking English	4.08*** .86
D4	Try to find out how to become a better learner	3.73***1.07
D5	Schedule myself to have enough time to study	3.23** 1.11
D6	Look for people to speak English	3.85***1.14
D7	Look for opportunities to read English	3.51** .98
D8	Have a clear goal to learn English	3.61***1.07
D9	Think about progress in learning English	3.92***1.10

(E1-E6 Affective Strategies)

E1	Relax myself when I speak English	3.76*** .95
E2	Encourage myself to speak English	3.65***1.01
E3	Give myself a reward when I do well	3.05** 1.19
E4	Notice if am tense and nervous when I use English	3.27** 1.26
E5	Write down my feelings in diary	2.22* 1.28
E6	Talk someone how I feel about learning English	3.22** 1.20

(F1-F6 Social Strategies)

F1	Ask to slow down or to say again when I do not understand	4.07***1.02
F2	Ask a native speaker to correct my English	3.46** 1.15
F3	Practice English with other students	3.75***1.13
F4	Ask help from a native speaker	3.84***1.05
F5	Ask questions in English	4.01*** .91
F6	Learn about the culture of a native speaker	3.85***1.06

* = > 2.49 (low frequency use)

**= between 2.5 and 3.49 (middle frequency use)

***= >3.5 (high frequency use)

Appendix K

Table 38

Mean Scores of the Strategies Used by Female, Male and the Total Sample Population

Table 38

Mean Scores of the Strategies Used by Female, Male and the Total Sample Population

Item	Descriptions	Female <u>M</u>	Male <u>M</u>	Total <u>M</u>
(A1-A9 Memory Strategies)				
A1	Relate what I already know and new things.	3.69	3.70	3.69
A2	Use new words in a sentence.	3.44	3.48	3.46
A3	Connect the sound and image of a new word.	3.38	3.65	3.50
A4	Make a mental picture of a new word.	3.32	3.30	3.31
A5	Use rhymes to remember new words.	2.56	2.64	2.59
A6	Use flash cards to remember a new word.	2.28	2.48	2.37
A7	Physically act out a new word.	2.59	2.48	2.54
A8	Review lessons often.	3.23	3.03	3.14
A9	Remember new words and phrases by their locations.	3.54	3.17	3.37
(B1-B14 Cognitive Strategies)				
B1	Recite and write a new word.	3.67	3.41	3.55
B2	Try to talk like a native speaker.	3.85	3.89	3.87
B3	Practice the sounds of English.	3.72	3.64	3.68
B4	Use a new word differently.	3.42	3.52	3.46
B5	Initiate English conversation.	3.56	3.41	3.49
B6	Watch movies and TV in English.	4.07	4.00	4.04
B7	Read English for pleasure.	3.25	3.17	3.21
B8	Write notes and letters in English.	3.42	3.33	3.38
B9	Skim English passage, then I read it carefully.	3.75	3.44	3.61
B10	Look for similarities between English and my first language.	3.27	3.14	3.21
B11	Find patterns in English.	3.38	3.27	3.33
B12	Divide a new word into parts to find out meaning.	3.17	2.98	3.09
B13	Try not to do word-for-word translation.	3.25	3.39	3.31
B14	Summarize what I hear and read in English.	2.79	2.85	2.82
(C1-C6 Compensation Strategies)				
C1	Make a guess to understand.	3.54	3.64	3.59
C2	Use gestures when I can not find a word.	3.85	3.74	3.80
C3	Make up a new word when I can not find a right one.	3.35	3.05	3.21
C4	Try to guess meaning without referring to a dictionary.	3.17	3.53	3.33

Table (continued)

Mean Scores of the Strategies Used by Female, Male and the Total Sample Population

C5	Try to guess what people say next.	3.10	3.67	3.35
C6	Look for similar words when I do not find exact words.	4.07	3.89	3.99
(D1-D9 Metacognitive Strategies)				
D1	Find as many ways to use English as possible.	3.62	3.71	3.66
D2	Notice my English mistakes to become better.	3.85	3.80	3.83
D3	Pay attention when someone speaking English.	4.27	3.85	4.08
D4	Try to find out how to become a better learner.	3.80	3.64	3.73
D5	Schedule myself to have enough time to study.	3.27	3.18	3.23
D6	Look for people to speak English.	3.59	3.56	3.58
D7	Look for opportunities to read English	3.47	3.56	3.51
D8	Have a clear goal to learn English	3.54	3.68	3.61
D9	Think about progress in learning English	3.83	4.03	3.92
(E1-E6 Affective Strategies)				
E1	Relax myself when I speak English.	3.85	3.65	3.76
E2	Encourage myself to speak English.	3.77	3.50	3.65
E3	Give myself a reward when I do well.	3.17	2.91	3.05
E4	Notice if am tense and nervous when I use English.	3.51	2.98	3.27
E5	Write down my feelings in diary.	2.04	2.21	2.12
E6	Talk someone how I feel about learning English.	3.43	2.95	3.22
(F1-F6 Social Strategies)				
F1	Ask to slow down or to say again. when I do not understand.	4.32	3.76	4.07
F2	Ask a native speaker to correct my English.	3.49	3.42	3.46
F3	Practice English with other students.	3.91	3.55	3.75
F4	Ask help from a native speaker.	3.93	3.73	3.84
F5	Ask questions in English.	4.04	3.98	4.01
F6	Learn about the culture of a native speaker.	3.98	3.70	3.85

*Figures in bold-faced print are the largest numbers of the group.

Appendix L

Table 39

Mean Scores for Individual Strategy Use Reported by Latino and Asian Samples

Table 39

Mean Scores for Individual Strategy Use Reported by Latino and Asian Samples

Item	Descriptions	Asian <u>M</u>	Latino <u>M</u>	Total <u>M</u>
(A1-A9 Memory Strategies)				
A1	Relate what I already know and new things.	3.61	3.77	3.69
A2	Use new words in a sentence.	3.51	3.41	3.46
A3	Connect the sound and image of a new word.	3.57	3.44	3.50
A4	Make mental picture of a new word.	3.32	3.31	3.31
A5	Use rhymes to remember new words.	2.96	2.24	2.59
A6	Use flash cards to remember a new word.	2.75	2.01	2.37
A7	Physically act out a new word.	2.46	2.63	2.54
A8	Review lessens often.	3.36	2.92	3.14
A9	Remember new words and phrases by their locations.	3.28	3.47	3.37
(B1-B14 Cognitive Strategies)				
B1	Recite and write a new word.	3.60	3.51	3.55
B2	Try to talk like a native speaker.	3.75	3.99	3.87
B3	Practice the sounds of English.	3.82	3.55	3.68
B4	Use a new word differently.	3.40	3.52	3.46
B5	Initiate English conversation.	3.28	3.69	3.49
B6	Watch movies and TV in English.	3.99	4.09	4.04
B7	Read English for pleasure.	3.04	3.37	3.21
B8	Write notes and letters in English.	3.57	3.20	3.38
B9	Skim English passage, then I read it carefully.	3.54	3.68	3.43
B10	Look for similarities between English and my first language.	2.99	3.43	3.21
B11	Find patterns in English.	3.38	3.29	3.33
B12	Divide a new word into parts to find out meaning.	3.14	3.04	3.09
B13	Try not to do word-for-word translation.	3.38	3.25	3.31
B14	Summarize what I hear and read in English.	3.06	2.59	2.82
(C1-C6 Compensation Strategies)				
C1	Make a guess to understand.	3.75	3.43	3.59
C2	Use gesture when I can not find a word.	3.71	3.89	3.80
C3	Make up a new word when I can not find a right one.	3.46	2.97	3.21
C4	Try to guess meaning without referring to a dictionary.	3.17	3.49	3.33

Table 39 (continued)

Mean Scores for Individual Strategy Use Reported by Latino and Asian Samples

C5	Try to guess what people say next.	3.49	3.23	3.35
C6	Look similar words when I do not find exact words.	4.07	3.92	3.99
(D1-D9 Metacognitive Strategies)				
D1	Find as many ways to use English as possible.	3.74	3.59	3.66
D2	Notice my English mistakes to become better.	3.88	3.79	3.83
D3	Pay attention when someone speaking English.	3.76	4.39	4.08
D4	Try to find out how to become a better learner.	3.51	3.93	3.73
D5	Schedule myself to have enough time to study.	2.97	3.48	3.23
D6	Look for people to speak English.	3.36	3.79	3.58
D7	Look for opportunities to read English	3.33	3.68	3.51
D8	Have a clear goal to learn English	3.38	3.83	3.61
D9	Think about progress in learning English	3.72	4.11	3.92
(E1-E6 Affective Strategies)				
E1	Relax myself when I speak English.	3.74	3.56	3.65
E2	Encourage myself to speak English.	3.74	3.79	3.76
E3	Give myself a reward when I do well.	3.15	2.96	3.05
E4	Notice if am tense and nervous when I use English.	2.96	3.57	3.27
E5	Write down my feelings in diary.	2.22	2.01	2.12
E6	Talk someone how I feel about learning English.	2.96	3.47	3.22
(F1-F6 Social Strategies)				
F1	Ask to slow down or to say again when I do not understand.	3.92	4.21	4.07
F2	Ask a native speaker to correct my English.	3.22	3.69	3.46
F3	Practice English with other students.	3.54	3.95	3.75
F4	Ask help from a native speaker.	3.71	3.96	3.84
F5	Ask questions in English.	3.93	4.09	4.01
F6	Learn about the culture of a native speaker.	3.88	3.83	3.85

* = > 2.49 (low frequency use)

** = between 2.5 and 3.49 (middle frequency use)

*** = > 3.5 (high frequency use)

Appendix M

Table 40

Mean Scores for Individual Strategy Use Reported by Latino Female, Asian Female,
Latino Male and Asian Male Samples.

Table 40

Mean Scores for Individual Strategy Use Reported by Latino Female, Asian Female, Latino Male and Asian Male Samples.

Item	Descriptions	Female Latino	Asian Female	Latino Male	Asian Male	Total Mean
(A1-A9 Memory Strategies)						
A1	Relate what I already know and new things.	3.89	3.46	3.61	3.77	3.69
A2	Use new words in a sentence.	3.45	3.43	3.35	3.60	3.46
A3	Connect the sound and image of a new word.	3.32	3.46	3.61	3.69	3.46
A4	Make a mental picture of a new word.	3.36	3.27	3.23	3.37	3.31
A5	Use rhymes to remember new words.	2.18	3.00	2.32	2.91	2.59
A6	Use flash cards to remember a new word.	1.84	2.81	2.26	2.69	2.37
A7	Physically act out a new word.	2.68	2.49	2.55	2.43	2.54
A8	Review lessons often.	3.52	2.89	3.13	2.94	3.14
A9	Remember new words and phrases by their locations.	3.70	3.35	3.13	3.20	3.37
(B1-B14 Cognitive Strategies)						
B1	Recite and write a new word.	3.77	3.54	3.13	3.66	3.55
B2	Try to talk like a native speaker.	4.02	3.65	3.94	3.86	3.87
B3	Practice the sounds of English.	3.64	3.81	3.42	3.83	3.68
B4	Use a new word differently.	3.45	3.38	3.61	3.43	3.46
B5	Initiate English conversation.	3.77	3.30	3.58	3.26	3.49
B6	Watch movies and TV in English.	4.11	4.03	4.06	3.94	4.04
B7	Read English for pleasure.	3.32	3.16	3.45	2.91	3.21
B8	Write notes and letters in English.	3.23	3.65	3.16	3.49	3.38
B9	Skim English passage, then I read it carefully.	3.93	3.54	3.32	3.54	3.61
B10	Look for similarities between English and my first language.	3.50	3.00	3.32	2.97	3.21
B11	Find patterns in English.	3.36	3.41	3.19	3.34	3.33
B12	Divide a new word into parts to find out meaning.	3.09	3.27	2.97	3.00	3.09
B13	Try not to do word-for-word translation.	3.09	3.43	3.48	3.31	3.31
B14	Summarize what I hear and read in English.	2.59	3.03	2.58	3.09	2.82
(C1-C6 Compensation Strategies)						
C1	Make a guess to understand.	3.39	3.73	3.48	3.77	3.59
C2	Use gestures when I can not find a word.	3.91	3.78	3.87	3.63	3.80
C3	Make up a new word when I can not find a right one.	3.05	3.70	2.87	3.20	3.21

Table 40

Mean Scores for Individual Strategy Use Reported by Latino Female, Asian Female,
Latino Male and Asian Male Samples.

C4	Try to guess meaning without referring to a dictionary.	3.36	2.95	3.68	3.40	3.33
C5	Try to guess what people say next.	3.02	3.19	3.52	3.80	3.33
C6	Look for similar words when I do not find exact words.	3.98	4.19	3.84	3.94	3.99
(D1-D9 Metacognitive Strategies)						
D1	Find as many ways to use English as possible.	3.52	3.73	3.68	3.74	3.66
D2	Use my English mistakes to become better.	3.82	3.89	3.74	3.86	3.83
D3	Pay attention when someone speaking English.	4.61	3.86	4.06	3.66	4.08
D4	Try to find out how to become a better learner.	4.11	3.43	3.68	3.60	3.73
D5	Schedule myself to have enough time to study.	3.61	2.86	3.29	3.09	3.23
D6	Look for people to speak English.	3.80	3.35	3.77	3.37	3.58
D7	Look for opportunities to read English	3.64	3.27	3.74	3.40	3.51
D8	Have a clear goal to learn English	3.75	3.30	3.94	3.46	3.61
D9	Think about progress in learning English	4.11	3.49	4.10	3.97	3.92
(E1-E6 Affective Strategies)						
E1	Relax myself when I speak English.	3.93	3.76	3.58	3.71	3.76
E2	Encourage myself to speak English.	3.61	3.95	3.48	3.51	3.65
E3	Give myself a reward when I do well.	3.18	3.16	2.65	3.14	3.05
E4	Notice if am tense and nervous when I use English.	3.77	3.19	3.29	2.71	3.27
E5	Write down my feelings in diary	1.82	2.30	2.29	2.14	2.12
E6	Talk someone how I feel about learning English.	3.75	3.05	3.06	2.86	3.22
(F1-F6 Social Strategies)						
F1	Ask to slow down or to say again. when I do not understand.	4.48	4.14	3.84	3.69	4.07
F2	Ask a native speaker to correct my English.	3.77	3.16	3.58	3.29	3.46
F3	Practice English with other students.	4.07	3.73	3.77	3.34	3.75

F4	Ask help from a native speaker.	4.05	3.78	3.84	3.63	3.84
F5	Ask questions in English.	4.18	3.86	3.97	4.00	4.01
F6	Learn about the culture of a native speaker.	3.91	4.05	3.71	3.69	3.85

Figures in bold-faced print are the largest numbers of the group.

VITA

Dai Osanai was born in Hokkaido Japan on August 23 1957. He attended Kanagawa University in Yokohama Japan and earned Bachelor's Degree in Law . In 1989, He received Master of Arts Degree in Bilingual Education from Northern Arizona University in Flagstaff Arizona.

Currently, He is an assistant professor at Georgia Southern University and is a program coordinator for the Japanese Minor Program at the institution. He published 3 CD's for Japanese school children to learn English from NEC Interchannel publications in Tokyo Japan in 1998. He also published a book entitled "The dreams and the realities of American universities" from Hamano Publications in Tokyo Japan in 2000.